PRE-INDUSTRIAL SOCIETIES AND STRATEGIES FOR THE EXPLOITATION OF RESOURCES

A theoretical framework for understanding why some settlements are resilient and some settlements are vulnerable to crisis

Daniel R. Curtis

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Pre-industrial societies and strategies for the exploitation of resources. A theoretical framework for understanding why some settlements are resilient and some settlements are vulnerable to crisis

Pre-industriële samenlevingen en exploitatie strategieën van middelen.
Een theoretisch kader ter verklaring voor de duurzaamheid of kwetsbaarheid van nederzettingen ten overstaan voor crisis
(met een samenvatting in het Nederlands)

Società pre-industriali e strategie per lo sfruttamento delle risorse.
Un quadro teorico per comprendere perché alcuni insediamenti sono resistenti e alcuni insediamenti sono vulnerabili di fronte alle crisi
(con un riassunto italiano)

Proefschrift

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door

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geboren op 1 Juli 1985 te Aylesbury (Verenigd Koninkrijk)

Promotor: Prof.dr. B.J.P. van Bavel

Preface

"We never think entirely alone: we think in company, in a vast collaboration; we work with the workers of the past and of the present. [Across] the whole intellectual world, each one finds in those about him the initiation, help, verification, [and] encouragement that he needs"

Antoine Sertillanges, *La vie intellectuelle*, 1920

The seeds of this project were sown during some time spent as a postgraduate student in medieval history at the University of Cambridge, although the theoretical scope and direction of the work has been shaped through a fruitful period spent at the Research Institute for History and Culture at Utrecht University. I am grateful to numerous individuals and institutions for their help and kindness during the research and writing process.

I am most indebted to my supervisor at Utrecht, Prof. Bas van Bavel, for sharing his considerable academic expertise and support. Above all, I have benefited from his active encouragement in pursuing an ambitious PhD project. As a result, this has left the thesis much more open to criticism, but I have also learnt that criticism is a good thing, and far better than writing something conservatively or with a narrow focus and then left to gather dust on bookshelves. The emphasis on comparative history and approaching social and economic developments across the *longue durée* is certainly down to the influence of Bas, as well as the explicit focus on how property structures and market institutions are very much socially-embedded. Bas always addresses you as an equal, which has given me encouragement and confidence.

While the theoretical stimulus has been provided through my time at Utrecht, the empirical skills needed to conduct research and work with archival manuscripts were cultivated at Cambridge. I thank my former supervisor Dr. Susan Oosthuizen for her time and expertise in this respect, as well as important guidance from Prof. Christine Carpenter and Prof. Rosamond McKitterick. My palaeographical skills were developed through an excellent course led by Dr. Tessa Webber.

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I am also grateful to the European University Institute in Fiesole, Tuscany, for granting me access as a visiting scholar for three months, which allowed me to conduct archival research in Florence. On that note, I thank all members of staff employed in the archives of Groningen, Arnhem, Bari, Florence, and the various colleges of Cambridge (including as well the Record Office at Shire Hall) for their help.

Finally, I am especially indebted to my parents, for without their support over the years, this thesis never would have come to fruition.

Utrecht, 2012 *D.R.C.*

In memory of Ken, a great man

'It's time for us as a people to start makin' some changes. Let's change the way we eat, let's change the way we live, and let's change the way we treat each other. You see the old way wasn't working so it's on us to do what we gotta do, to survive'.

Tupac Shakur

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Abbreviations

All journal titles are spelled out in full. Archives and some recurrent printed sources are abbreviated, however.

Archives

ASA – *Archivio di Stato di Arezzo*
ASB – *Archivio di Stato di Bari*
ASC – *Archivio di Stato di Cosenza*
ASF – *Archivio di Stato di Firenze (Florence)*
ASN – *Archivio di Stato di Napoli (Naples)*
ASP – *Archivio di Stato di Pisa*
ASFO – *Archivio di Stato di Foggia*
ASEM – *Archivio Storico dell'Eremo e Monastero di Camaldoli*
BCP – *Biblioteca Comunale di Poppi*
BNF – *Biblioteca Nazionale Centrale di Firenze* (Florence)
BL – British Library (London)
CCRO – Cambridgeshire County Record Office (Shire Hall, Cambridge)
CUL – Cambridge University Library
GELA – *Gelders Archief* (Arnhem)
GA – *Groninger Archieven* (Groningen)
KCA – King's College Archives (Cambridge)
MCA – Merton College Archives (Cambridge)
NADH – *Nationaal Archief Den Haag* (The Hague)
PCA – Pembroke College Archives (Cambridge)
RAR – *Regionaal Archief Rivierenland* (Tiel)
SCC – St. Catherine's College Archives (Cambridge)
SWB – *Streekarchivariaat West-Betuwe* (Geldermalsen)
TNA – The National Archives (Kew)

Recurring printed sources

RC – *Regesto di Camaldoli*
RH – *Rotuli Hundredorum*
VCH – Victoria County History

Chapter 1
The resilience and vulnerability of settlements: introducing the historiography

"Civilizations are fragile, impermanent things. This fact inevitably captures our attention, and however we might wish otherwise, prompts disturbing questions".

Joseph Tainter

This thesis tries to provide an answer to one main question. Why in the pre-industrial period were some settlements resilient and stable over the long term while other settlements were vulnerable to crisis?[1] Indeed, what made certain human habitations more prone to decline or even total collapse, than others? All pre-industrial societies had to face economic, environmental, and agricultural challenges at some point, which could come in the form of famine, war, expropriation, flooding, failed harvests, pestilence, harsh taxation, or the disappearance of valuable resources in the pursuit of commercial gain. How then can we explain why some societies were able to overcome or negate these problems, while other societies proved susceptible to failure, as settlements contracted, stagnated, were abandoned, or even disappeared entirely?[2] In this first chapter, some of the main literature on the resilience or vulnerability of settlement to decline or collapse is described. Following the historiographical tradition, the approach taken in this thesis is introduced.

1.1 Malthusian-ideologies and the population-resources framework

The population-resources framework has often been employed to explain why societies and settlements failed in the pre-industrial period, often founded upon an underlying theory of 'Malthusian Crisis'. In these explanations, societies failed to combat the destabilising effects of demographic pressure on an (often) finite pool of resources, which put the future sustainability of settlements in danger.[3] It is the story of people outstripping resources, straining the natural environment, and leading to an inevitable breaking point. Even modern-day societal collapses have been explained with recourse to this framework.[4]

Famous advocates of the population-resources framework were the social and economic historians of the pre-industrial period; Michael Postan, Georges Duby,

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[1] The importance of further research into this question and the coming together of social history and environmental studies has recently been asserted in P. Boomgaard & M. 't Hart, 'Globalization, environmental change, and social history: an introduction', *International Review of Social History*, 18 (2010), 7.

[2] For example, certain societies have been shown to have withstood famine better than others in M. Ravaillon, 'Famines and economics', *Journal of Economic Literature*, 35.3 (1997), 1208; C. O'Grada, 'Markets and famines in pre-industrial Europe', *Journal of Interdisciplinary History*, 36 (2005), 143-66.

[3] A Malthusian paradigm recently resurrected in G. Clark, *A farewell to alms: a brief economic history of the world* (Princeton, 2007), 1-18.

[4] For example, Rwandan genocide in 1994 in C. André & J-P. Platteau, 'Land relations under unbearable stress: Rwanda caught in the Malthusian trap', *Journal of Economic Behaviour & Organization*, 34.1 (1998), 1-47.

Bernard Slicher van Bath, Wilhelm Abel, and Emmanuele Le Roy Ladurie. In their interpretation, the total collapse of settlements across Europe around the time of the Black Death simply capped off what was already a long-term trend towards stagnation and decline anyway.[5] According to the theory, relentless population growth in Europe from the eleventh century reached a critical point around the end of the thirteenth century. The retraction in settlement in the fourteenth century was only inevitable given the pressure on existing resources. Apparently, their argument was strengthened by the fact that so many societies had expanded cultivation into so-called 'marginal' lands; peripheral area unsuited arable or intensive farming. The numerous late-medieval deserted villages were the telling results of this vulnerability.[6] Such a view has remained quite controversial,[7] and empirical research has since shown that settlements in the 'marginal' areas did not decline any more than settlements in the 'old-settled' areas, thus raising some doubts about the validity of the theory.[8] Furthermore, there has been some doubt about the timing of

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[5] The most important works being M. Postan, 'Some agrarian evidence of declining population in the later Middle Ages', in *Essays on medieval agriculture and general problems of the medieval economy* (Cambridge, 1973), 186-213; B. Slicher van Bath, *De agrarische geschiedenis van West-Europa (500-1850)* (Utrecht, 1960); G. Duby, *L'économie rurale et la vie des campagnes dans l'Occident medieval* (2 vols, Paris, 1962); W. Abel, *Agrarkrisen und Agrarkonjunktur* (Berlin, 1935); E. Le Roy Ladurie, *Les paysans de Languedoc* (2 vols, Paris, 1966).

[6] For the deserted medieval villages of Europe, see C. Dyer & R. Jones (eds.), *Deserted villages revisited* (Hatfield, 2010); M. Beresford, *The lost villages of England* (London, 1954); W. Abel, *Die Wüstungen des ausgehenden Mittelalters. Ein Beitrag zur Siedlung- und Agrargeschichte Deutschlands* (Jena, 1943); M. Beresford & J. Hurst, *Deserted medieval villages* (London, 1971); T. Rowley & J. Wood, *Deserted villages* (Aylesbury, 1982); R. Hilton, 'Villages désertés et histoire économique: recherches françaises et anglaises', *Études Rurales*, 32 (1968), 104-9; E. Le Roy Ladurie & J-M. Pesez, 'Les villages désertés en France', *Annales. Economie, Sociétés, Civilisations*, 20 (1965), 257-90; R. Romano & P. Corbin (eds.), *Villages désertés et histoire economique. XI-XVIII siècles* (Paris, 1965); H. Pohlendt, *Die Verbreitung der mittelalterlichen Wüstungen in Deutschland* (Göttingen, 1950); S. Gissel et al., *Desertion and land colonization in the Nordic Countries c.1300-1600* (Stockholm, 1981); H. Antonson, 'The extent of farm desertion in central Sweden during the late medieval agrarian crisis: landscape as a source', *Journal of Historical Geography*, 35.4 (2009), 619-41.

[7] Particularly by those critical of the view that population pressure on resources was an entirely uncontrollable process; for example, see the famous E. Boserup, *The conditions of agricultural growth: the economics of agrarian change under population pressure* (London, 1965). For a good overview of the critical reaction to the population-focused explanations, see M. Bailey & J. Hatcher, *Modelling the Middle Ages: the history and theory of England's economic development* (Oxford, 2001).

[8] C. Dyer, 'The retreat from marginal land: the growth and decline of medieval rural settlements', in M. Aston, D. Austin, & C. Dyer (eds.), *The rural settlements of medieval England: studies dedicated to Maurice Beresford and John Hurst* (Oxford, 1989), 45-57; 'Villages in crisis: social dislocation and desertion, 1370-1520', in Dyer & Jones (eds.), *Deserted villages revisited*, 29; 'Deserted medieval

settlement abandonment in medieval Western Europe; some suggesting that it occurred far later in the fifteenth century in certain parts.[9]

Even if the Malthusian notion of the inevitability of population outstripping resources is not taken up, scholars have tended to explain the vulnerability of settlements to decline and even collapse through demographic pressures on limited resources. Indeed, recent literature puts more emphasis on the human capacity to protect or degrade their environment; a scholarship more directly influenced by our now greater awareness of climate change and the growing importance of disciplines such as 'environmental history' within academia. Rapid decline of habitation, whether in the pre-industrial or post-industrial age, has been framed in a general story of human destruction of their natural environment. Frequently, settlement decline is associated with the chopping-down of too many trees or the over-exploitation or ruination of the soils.[10] These sorts of population-resources frameworks have captured the general public's imagination; whether that be in the mysterious disappearance of the Ancient Mayan civilisation of Central America or the curious depopulation of isolated Easter Island. Indeed, the fascination with these famous societal collapses can explain the international best-seller status of author Jared Diamond, who has even written a book with the title 'Collapse: how societies choose to fail or succeed', as if to emphasize the role of human decision-making in the process and disassociate himself with purely environmentally deterministic literature.[11] The basic point put forward in this kind of work is that societies and

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villages in the West Midlands', *Economic History Review*, 35.1 (1982), 33; M. Bailey, 'The concept of the margin in the medieval economy', *Economic History Review*, 42.1 (1989), 1-17.

[9] M. Austermann, 'Archäologische Forschungen zu den mittelalterlichen Siedlungen in der Wetterau. Ergebnisse der Arbeit von 1993-1997', *Siedlungforschung*, 17 (1999), 47-64.

[10] For deforestation, see T. Dunin-Wąsowicz, 'Natural environment and human settlement over the Central European Lowland in the 13th century', in P. Brimblecombe & C. Pfister (eds.), *The silent countdown: essays in European environmental history* (Berlin, 1990), 94-5. For example, erosion and sand drifts, see H. Heitinga, *Medieval settlement and economy north of the Lower Rhine: archaeology and history of Kootwijk and the Veluwe (the Netherlands)* (Assen, 1987), 105-27; 'Indications of severe drought during the 10th century AD from an inland dune area in the Central Netherlands', *Geologie en Mijnbouw*, 63 (1984), 218-48; *Verdwenen dorpen in het Kootwijkerzand* (Amsterdam, 1976); E. Koster, 'De invloed van markebosse op de vorming van zeer hoge stuifzandruggen ('randwallen') op de Veluwe', *Boor en Spade*, 16 (1968), 66-72; M. Lascaris, 'Zandverstuivingen op de noordwestelijke Veluwe', *Historisch-Geografisch Tijdschrift*, 17 (1999), 54-63. For salinisation, see R. McAdams, *Heartland of cities. Surveys of ancient settlement and land use on the central floodplain of the Euphrates* (Chicago, 1981), 13; S. O'Hara & T. Hannan, 'Irrigation and water management in Turkmenistan: past systems, present problems and future scenarios', *Europe-Asia Studies*, 51.1 (1999), 27.

[11] J. Diamond, *Collapse: how societies choose to fail or succeed* (New York, 2005).

settlements were most vulnerable when they failed to halt degradation of the natural resources.

1.2 Domination, expulsion, and violence

The application of power is another avenue through which the resilience or vulnerability of settlement has been considered. Some societies were vulnerable to decline because of the chances of violent expropriation. Often this came in the form of the forcible expulsion of people from an area; for example, the Moriscos (former Muslim population) from the Kingdoms of Aragon and Valencia in 1610 by King Phillip II, which led to demographic deterioration.[12] Elsewhere powerful landowners went on the search of royal edicts so they could throw out the inhabitants of swamps and woodlands in order to make way for new land reclamation projects.[13] Inhabitants of the Rio Grande region of New Mexico were forced to abandon their large pueblo villages during the period of sixteenth and seventeenth century Spanish colonisation.[14] Elsewhere, agriculturalists that had lost the means of production and had become proletarian workers on large farms frequently found that their susceptibility to eviction from their homes by landlords rose.[15] The same connection between expropriation of land by dominant powers and the vulnerability of settlement is just as applicable for the modern world: one example being the 'land reform' scheme in Zimbabwe instigated by Robert Mugabe which by the year 2000 consisted of the violent invasion and seizure of white farmers' lands.[16]

Marxist scholars have tended to emphasize the tendency for lords or wealthy landowners to use their extra-economic powers and jurisdictions to evict subordinate tenants from their homes as and when they wanted, especially in the interests of land

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[12] J. Salas, 'La evolución demográfica aragonesa en los siglos XVI y XVII', in J. Nadal (ed.), *La evolución demográfica bajo los Austrias* (Madrid, 1991), 169-79; 'Migraciones internas y medium-distance en Aragón (1500-1900)', in *I Conferentia Europea de la Comisión Internacional de Demografía Histórica*, i (Santiago, 1993), 189-225.

[13] R. Morera, 'Environmental change and globalization in seventeenth-century France: Dutch traders and draining of French wetlands (Arles, Petit Poitou)', *International Review of Social History*, 55 (2010), 86.

[14] J. Kulisheck, 'Pueblo population movements, abandonment and settlement change in sixteenth and seventeenth century New Mexico', *Kiva*, 69.1 (2003), 30-54.

[15] C. Crais, *White supremacy and black resistance in pre-industrial South Africa: the making of the colonial order in the Eastern Cape, 1700-1865* (Cambridge, 1992), 218-9.

[16] See, for example, W. Shaw, 'They stole our land: debating the expropriation of white farms in Zimbabwe', *Journal of Modern African Studies*, 41.1 (2003), 75-89.

enclosure.[17] This has been labelled a 'depopulation hypothesis'.[18] Villages were sometimes destroyed to make way for monastic granges, for example.[19] However, this view has been slightly nuanced by empirical research from England, where it has been suggested that although this could have happened in theory, rarely did it occur in practice.[20] A similar questioning of the power of signorial lords to evict tenants has also been applied to areas of pre-industrial Eastern Europe.[21] Furthermore, this kind of argumentation tends to end up reducing communities capable of active thought and decision-making to mere passive victims.[22] Nonetheless, even if dominant powers did not always follow through with expropriation of land and housing of their subordinates in the pre-industrial period, certainly they could speed up settlement decline. Indeed literature on the 'open' and 'closed' parishes of England in the

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[17] R. Brenner, 'Agrarian class structure and economic development in pre-industrial England', *Past & Present*, 70 (1976), 30-75; R. Tawney, *The agrarian problem in the sixteenth century* (London, 1967), xiii, 264, 283. In particular, the enclosure of land for pastures and parks; for example, see W. Thomas, 'Lost villages in south-west Carmarthenshire', *Transactions of the Institute of British Geographers*, 47 (1969), 191-203; M. Beresford, 'The deserted villages of Warwickshire', *Transactions of the Birmingham Archaeological Society*, 66 (1950), 49-106; I. Gray, 'A Gloucestershire postscript to the Domesday of Inclosures', *Transactions of the Bristol & Gloucestershire Archaeological Society*, 97 (1979), 75-80; K. Mew, 'The dynamics of lordship and landscape as revealed in a Domesday study of the Nova Foresta', *Anglo-Norman Studies*, 23 (2000), 155-66.

[18] Dyer, 'Villages in crisis', 30.

[19] D. Knowles, *The monastic order in England: a history of its development from times of Saint Dunstan to the Fourth Lateran Council, 943-1216* (Cambridge, 1950), 350-1; R. Donkin, 'Settlement and depopulation on Cistercian estates during the 12th and 13th centuries, especially in Yorkshire', *Historial Research*, 33 (1960), 143-9, 152-6; M. Barley, 'Cistercian land clearances in Nottinghamshire: three deserted villages and their moated successor', *Nottingham Medieval Studies*, 1 (1957), 75-89.

[20] M. Overton, *Agricultural revolution in England: the transformation of the agrarian economy 1500-1850* (Cambridge, 1996), 180; C. Dyer, 'Occupation of the land: the West Midlands', in J. Thirsk & E. Miller (eds.), *The Agrarian History of England and Wales, 1348-1500*, iii (Cambridge, 1991), 81; R. Hilton, *The English peasantry in the later Middle Ages* (Oxford, 1975), 191-3. Especially given the high costs associated with the eviction process as described in T. Guinnane & R. Miller, 'Bonds without bondsmen: tenant-right in nineteenth-century Ireland', *Journal of Economic History*, 56 (1996), 113.

[21] J. Blum, *The end of the social order in rural Europe* (Princeton, 1978), 103. Many studies emphasizing the stability of tenant holdings in the face of signorial pressure; for example, see C. Wetherell, A. Plakans & B. Wellman, 'Social networks, kinship, and community in Eastern Europe', *Journal of Interdisciplinary History*, 24 (1994), 639-63; H. Zeitlhofer, 'Bezitztransfer in frühneuzeitlichen ländlichen Gesellschaften: die südbömische Pfarre Kapličky (Herrschaft Vyšši Brod), 1640-1840', in R. Cerman & H. Zeitlhofer (eds.), *Soziale Strukturen im Böhmen. Ein regionaler Vergleich von Wirtschaft und Gesellschaft 16.-19. Jahrhundert* (Munich, 2002), 240-61; W. Hagen, *Ordinary Prussians. Brandenburg junkers and villagers, 1500-1840* (New York, 2002).

[22] As noted in M. Bourin & R. Durand, *Vivre au village au Moyen Age. Les solidarités paysannes du Xe au XIII siècles* (Rennes, 2000).

eighteenth and nineteenth centuries emphasizes how powerful landlords limited and stopped the lower orders living in the same parish as themselves, in order to reduce the poor rate they would have to pay.[23] Instead, labour for their farm was provided by labourers (living in the open parishes) who had to walk to work from many kilometres out.[24] Elsewhere, capricious taxation has been cited as one key reason for the break-down and disintegration of rural communities; for example, in sixteenth-century Greece.[25]

Often the capacity for dominant groups to use violence and warfare has been cited as a reason for the vulnerable status of settlements. It should come as no surprise that numerous pre-industrial (and post-industrial)[26] settlements were either abandoned or destroyed as a result of warfare, while even in the twenty-first century, millions of people in under-developed countries are displaced from their homes.[27] The Dutch Revolt of the sixteenth century led to entire destruction of fishing villages.[28] The 'Harrying of the North' by William the Conqueror left a trail of ruined settlements in eleventh-century Northern England.[29] In Germany, famine, sickness, and the abandonment of farms, were just some of the devastating consequences of the Thirty Years War.[30] Military destruction inflicted further miseries on the lives of

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[23] B. Holderness, 'Open and close parishes in England in the eighteenth and nineteenth centuries', *Agricultural History Review*, 20.2 (1972), 126-39. Although a wider range of reasons than simply the poor law have been discussed in S. Banks, 'Nineteenth century scandal or twentieth century model? A new look at open and close parishes', *Economic History Review*, 41.1 (1988), 54.

[24] K. Snell, 'Settlement, poor law and the rural historian: new approaches and opportunities', *Rural History*, 3.2 (1992), 145-72; J. Sheppard, 'East Yorkshire's agricultural labour force in the mid-nineteenth century', *Agricultural History Review*, 9 (1961), 43-54.

[25] V. Parry, 'The Ottoman Empire, 1566-1617', in *The New Cambridge Modern History*, iii (Cambridge, 1968), 347-76; J. Wagstaff, 'War and settlement desertion in the Morea, 1685-1830', *Transactions of the Institute of British Geographers*, 3.3 (1978), 305; H. Antoniadis-Bibicou, 'Villages désertés en Grèce – un bilan provisoire', in Romano & Corbin (eds.), *Villages désertés et histoire economique*, 343-417.

[26] A classic example being almost total settlement desertion caused through Arab-Israeli conflict. W. Harris, 'War and settlement change: the Gohan Heights and the Jordan Rift, 1967-77', *Transactions of the Institute of British Geographers*, 3.3 (1978), 309-30.

[27] See IDMC, 'Internal displacement monitoring centre', <http://www.internal-displacement.org/>.

[28] D. Tys & M. Pieters, 'Understanding a medieval fishing settlement along the southern Northern Sea: Walraversijde, c. 1200-1630', in L. Sicking & D. Abreu-Ferreira (eds.), *Beyond the catch: fisheries of the North Atlantic, the North Sea and the Baltic, 900-1850* (Leiden, 2009), 91-122.

[29] See W. Kapelle, *The Norman Conquest of the North: the region and its transformation 1000-1135* (Chapel Hill, 1979).

[30] W. Abel, *Agricultural fluctuations in Europe from the thirteenth to the twentieth centuries* (New York, 1978), 155-6; W. Hagen, 'Seventeenth-century crisis in Brandenburg: the Thirty Years' War, the destabilization of serfdom, and the rise of absolutism', *American Historical Review*, 94 (1989), 327-8.

'ordinary' rural folk, who already were struggling to maintain subsistence.[31] The presence of soldiers did not just mean killings but it also brought exactions and plundering, the destruction of fields and dikes, and the outbreak of contagious diseases.[32] Sometimes the effects were more indirect – such as the disruption to the traditional pastoral way of life as suggested for the second Arab invasions (Hilali) in parts of Berber Morocco in the eleventh and twelfth centuries.[33]

Some areas of the countryside were so vulnerable, that people avoided building there altogether. In parts of the Mediterranean such as Sicily, the threat of brigandage and fears over public order were so severe, that it has been suggested that nobody dared live anywhere but the towns.[34] To live isolated in the countryside was to expose oneself to all kinds of danger. Governments did not always ensure safety for its populations, and sometimes actively contributed to settlement vulnerability in pursuit of its own interests. In the first half of the twentieth century, governmental officers of the Afenmai district of Nigeria caused hill-dwelling communities to abandon their lands by resorting to burning their homes.[35] Even in modern-day China, the damming of the Yangtze River (made possible through funding from a number of loans from international commercial banks and corporate bonds) has led to the forcible relocation of settlements and the flooding of villages and lands – a process which the rural communities had no power to prevent.[36]

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[31] See E. Thoen, 'Warfare and the countryside: social and economic aspects of the military destruction in Flanders during the late Middle Ages and the early modern period', *Acta Historiae Neerlandicae. The Low Countries History Yearbook*, 13 (1980), 25-38; 'Oorlogen en platteland. Sociale aspekten van militaire destruktie in Vlaanderen tijdens de late Middeleeuwen en de vroeg moderne tijden', *Tijdschrift voor Geschiedenis*, 91.3 (1978), 363-78; L. Adriaenssen & M. 't Hart, 'Farming communities at risk. War and economic structures in the Netherlands; some evidence from the Meierij and Westerwolde, c. 1550-1700' (unpublished paper, University of Amsterdam, 2005).

[32] P-M. Hahn, 'Kriegserfahrungen von Kindern und Jugendlichen im Zeitalter des Dreissigjärigen Krieges', in D. Dahlmann (ed.), *Kinder und Jugendliche in Krieg und Revolution. Vom Dreissigjärigen Krieg bis zu den Kindersoldaten Afikas* (Paderborn, 2000), 6; A. Hochet, *Etudes socio-économiques conduites dans les regions de Tombali et Buba: les villages exploitant les rizieres des bords du rio Cumbidja* (Bissau, 1979), 26-39.

[33] R. Lawless, 'The lost Berber villages of eastern Morocco and western Algeria', *Man*, 7.1 (1972), 118.

[34] A. Blok, *The mafia of a Sicilian village, 1860 to 1960: a study of violent peasant entrepreneurs* (Oxford, 1974); M. Weber, *The city* (New York, 1962), 82.

[35] R. Bradbury, *The Benin Kingdom and the Edo-speaking peoples of south-western Nigeria* (London, 1957), 113; M. Gleave, 'Hill settlements and their abandonment in tropical Africa', *Transactions of the Institute of British Geographers*, 40 (1966), 45.

[36] J. Jing, 'Rural resettlement: past lessons for the Three Gorges project', *The China Journal*, 38 (1997), 65-92; 'Villages dammed, villages repossessed: a memorial movement in northwest China', *American Ethnologist*, 26.2 (1999), 324-43; L. Heming, P. Waley & P. Rees, 'Reservoir resettlement in China: past

1.3 Environmental determinism

Although environmental determinism is becoming less frequently invoked on its own as an explanatory framework, it is still used (particularly in studies on a global scale) to explain why some habitations around the world are more vulnerable to crisis or collapse than others.[37] Indeed, it cannot be denied that there are certain parts of the world more favourable to human settlement than others. The emergence of the world's first settled farming systems in the Fertile Crescent of the Middle East from about 9000 BCE has been put down to high levels of fertility in the soils to support sown agriculture.[38] According to some scholars, settlement and agriculture in North-West Europe before the late thirteenth century benefited from more stable and predictable climatic conditions than seen in the late Middle Ages.[39]

Pre-industrial Europe had its environmental problems in the form of flooding,[40] and it even experienced disastrous earthquakes in the South.[41] Generally, however, if taken on a global comparative level, scholars inevitably agree that environmental dangers were more severe in Asia, Africa, or America. Hurricanes were a constant threat in tropical climates, and it is well-known that the plantation economies of the Caribbean suffered when strong winds tore the flimsy wooden shacks to pieces.[42] Many settlements faced the potential threat of volcanoes, earthquakes, and tsunamis, as they were located close to converging tectonic plates,

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experience and the Three Gorges dam', *The Geographical Journal*, 167.3 (2001), 195-212; R. Stone, 'Three Gorges dam: into the unknown', *Science*, 321 (2008), 628-32.

[37] See a recent issue in H. Weiss & R. Bradley, 'What drives societal collapse?', *Science*, 291 (2001), 609-10.

[38] J. Diamond, *Guns, germs, and steel: the fates of human societies* (New York, 1997), 79-90; P. Bellwood, *the first farmers: the origins of agricultural societies* (Oxford, 2005), 44-66.

[39] M. Bailey, 'Per impetum maris: natural disaster and economic decline in Eastern England, 1275-1350', in B. Campbell (ed.), *Before the Black Death. Essays in the crisis of the early fourteenth century* (Manchester, 1991), 184-208; G. Utterstrom, 'Climate fluctuations and population problems in early modern history', *Scandinavian Economic History Review*, 3 (1955), 3-47; M. Parry, *Climatic change, agriculture and settlement* (Folkestone, 1978), 85.

[40] A. de Kraker, 'Reconstruction of storm frequency in the North Sea Area of the preindustrial period, 1400-1625', *History of Meteorology*, 2 (2005), 51-69.

[41] E. Boschi, E. Guidoboni, G. Ferrari, G. Valensise & P. Gasperini, *Catalogo dei forti terremoti in Italia dal 461 a.C. al 1990* (Bologna, 1997). Over 15,000 burned or ruined houses recorded in A. Pereira, 'The opportunity of a disaster. The economic impact of the 1755 Lisbon earthquake', *Journal of Economic History*, 69 (2009), 466-99; B. Aguirre, 'Better disaster statistics: the Lisbon earthquake', *Journal of Interdisciplinary History*, 43.1 (2012), 27-42.

[42] M. Mulcahy, *Hurricanes and society in the British Greater Caribbean, 1624-1783* (Baltimore, 2006).

and many societies had to deal with fluctuating and extreme temperatures, causing blizzards, hailstorms, droughts, and heat-waves. Unpredictable weather conditions led to some of the deadliest flooding of the Yellow, Yangtze, and Huai Rivers in China in the nineteenth and twentieth centuries.[43] Exceptionally cold and mountain regions such as Iceland were always susceptible to avalanches, while hot and dry areas of the world had to deal with possibility of bushfires, which could (and still do) spread through wooded areas very quickly.[44] Settlement vulnerability has also been considered in connection with the spread of disease. Marshland societies faced the threat of malaria, especially in warmer climates, and people were fearful of venturing into these areas.[45] More significant in the literature, however, has been the work on European colonists exposing contacted peoples to new germs – and therefore disease epidemics. According to some authors, the arrival of Columbus in the New World brought about one the greatest population disasters in history.[46] In that sense, the vulnerability of societies has been reduced to the chances of biology – something that has not gone without criticism.[47]

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[43] D. Pietz, *Engineering the state: the Huai River and reconstruction in nationalist China, 1927-1937* (London, 2002), 61-70; Y. Kueh, *Agricultural instability in China, 1931-1991: weather, technology, and institutions* (Oxford, 1995), 182.

[44] E. Le Roy Ladurie, 'Climat et récoltes aux XVIIe et XVIII siècles', *Annales. Histoire, Sciences Sociales*, 15.3 (1960), 434-65; The State Library of Victoria, 'Bushfires in Victoria', <http://guides.slv.vic.gov.au/bushfires/>.

[45] See, for example, F. Snowden, 'Fields of death: malaria in Italy, 1861-1962', *Modern Italy*, 4.1 (1999), 25-57; L. Bruce-Chwatt & J. de Zulueta, *The rise and fall of malaria in Europe: a historico-epidemiological study* (Oxford, 1980); H. Roy Meterns & G. Terry, 'Dying in paradise: malaria, mortality, and the perceptual environment in colonial South Carolina', *Journal of Southern History*, 50.4 (1984), 533-50; M. Dobson, 'Marsh fever: the geography of malaria in England', *Journal of Historical Geography*, 6 (1980), 357-89.

[46] A. Crosby, 'Conquistador y pestilencia: the first New World pandemic and the fall of the great Indian Empires', *Hispanic American Historical Review*, 47.3 (1967), 321-37; *Ecological imperialism: the biological expansion of Europe, 900-1900* (Cambridge, 1986), 195-216; 'Infectious disease and the demography of the Atlantic peoples', *Journal of World History*, 2.2 (1991), 123; *The Columbian exchange: biological and cultural consequences of 1492* (Westport, 1972), 38; 'Virgin soil epidemics as a factor in the Aboriginal depopulation in America', *William & Mary Quarterly*, 33.2 (1976), 289-99; H. Dobyns, *Their numbers became thinned: Native American population dynamics in Eastern North America* (Knoxville, 1983), 34; R. Thornton, *American Indian holocaust and survival: a population history since 1492* (Norman, 1987); W. McNeill, *Plagues and peoples* (Garden City, 1976), 177; F. Guerra, 'El efecto demográfico de las epidemias trás el descubrimiento de América', *Rivista de Indias*, 46 (1986), 41-58; D. Cook, *Born to die: disease and New World conquest, 1492-1650* (Cambridge, 1998).

[47] See the critique of the literature in S. Alchon, *A pest in the land: New World epidemics in a global perspective* (Albuquerque, 2003).

1.4 The flight to the city

Rather than exposure to a set of difficult conditions, many regions of declining or stagnating pre-industrial settlement have been explained with recourse to a 'flight to the city' narrative. In effect, the emergence of a number of significant cities and towns from the Middle Ages onwards represented the 'pull' factor that dragged rural inhabitants (perhaps away from impoverishment and limited employment) towards new urban opportunities.[48] Of course, the emergence of urban markets could stimulate more intensive agricultural exploitation, land reclamation, and further expansion of settlement; a framework used to explain, for example, eighteenth-century recovery in parts of the Ottoman Empire or intrusion into the highlands around the Yangtze River in China.[49] Frequently, however, the rise of cities and towns and in particular the formalisation of their territorial jurisdictions over their hinterlands has been associated with a stagnating and detrimental effect on the stability of settlements in the countryside – often fuelling rural-urban migration.[50] In fact, it has been suggested in tougher economic periods that the swarm of rural people upon the cities in search of work and food was so great that many urban governments chose to close their gates to avoid beggars and vagrants.[51] Consequently, the outward migration of people from their rural settlements towards new urban opportunities also led to the unravelling of important structures (which required constant maintenance) such as hydraulic works.[52] Economic polarisation in early-

[48] Emphasized in L. Lucassen & W. Willems, 'Why people want to live in the city: looking back', in *Living in the city. Urban institutions in the Low Countries, 1200-2010* (London, 2012), 216-26.

[49] M. Wagstaff & E. Frangakis-Syrett, 'The port of Patras in the second Ottoman period. Economy, demography and settlements, c. 1700-1830', *Revue de Monde Musulman et de la Méditerranée*, 66 (1992), 89-91; J. Richards, *The unending frontier: an environmental history of the early modern World* (Berkeley, 2003), 129.

[50] See, for example, D. Herlihy, 'Santa Maria Impruneta: a rural commune in the late Middle Ages', in N. Rubinstein (ed.), *Florentine studies: politics and society in Renaissance Florence* (London, 1968), 242-76; C. Klapisch-Zuber, 'Villaggi abbandonati ed emigrazioni interne', *Storia d'Italia*, 5 (1973), 311-69; P. Daileader, 'Town and countryside in northeastern Catalonia, 1267-c. 1450: the *sobreposats de la horta* of Perpignan', *Journal of Medieval History*, 24.4 (1998), 365-6

[51] J. Gutton, *La société et les pauvres en Europe, XVIe-XVIIIe siècles* (Paris, 1974).

[52] M. Cattini, 'Strade liquide e archipelaghi di terre: lo spazio estense visto da Ferrara', in G. Papagno & A. Quondam (eds.), *La corte e lo spazio estense* (Rome, 1982), 119-30.

modern Europe often preceded a mass exodus of rural people to the city.[53] In a famous theory posited by Edward Wrigley, agricultural progress and the consolidation of farms in England led to an increased demand for manufactured products and services, which in turn set in motion the flight to the city.[54] During the latter part of the nineteenth century, more than one-fifth of Sweden's inhabitants left the countryside for the city, leaving whole villages deserted or at least heavily stagnating communities.[55] Flight from the land or '*landflucht*' has similarly been commonly referred to by famous scholars such as Max Weber in reference to rural-urban migration in Germany and Prussia in the nineteenth century.[56]

The vulnerability of rural settlements in many areas has arguably increased into the twentieth century with the dissemination of highly dominant urban culture, the development of technological solutions, and the fact that so many rural people are now divorced from the agricultural productive processes.[57] Isolated mountain regions have been highlighted as particularly vulnerable in this regard.[58] Indeed, a major concern of governments in both 'developed' and 'underdeveloped' nations is the skewed distribution of people towards main centres, while the peripheries suffer from depopulation, the so-called 'brain drain' (flight of young educated people), and an

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[53] S. Hochstadt, *Mobility and modernity. Migration in Germany, 1820-1989* (Michigan, 1999); J. Jackson, *Migration and urbanisation in the Ruhr Valley, 1820-1914* (Atlantic Highlands, 1997); M. Oris, 'Cultures de l'espace et cultures économiques parmi les populations urbaines liégeoises au xixe siècle', in Y. Landry et al. (eds.), *Les chemins de la migration en Belgique et au Québec du XVIIe au Xxe siècle* (Louvain, 1995), 165-72; J. Rosenthal, *Les sentiers invisibles. Espace, familles, et migrations dans la France du 19e siècle* (Paris, 1999). On the general process, see L. Lucassen & J. Lucassen, 'The world we lost. European migrations 1500-1830', in D. Knauf & B. Moreno (eds.), *Leaving home. Migration yesterday and today* (Bremen, 2009), 11-24.

[54] E. Wrigley, 'Men on the land and men in the countryside: employment in agriculture in early-nineteenth century England', in L. Bonfield, R. Smith & K. Wrightson (eds.), *The world we have gained: histories of population and social structure* (Oxford, 1986), 295-336. Also see *Idem*, 'Urban growth and agricultural change: England and the Continent in the early modern period', *Journal of Interdisciplinary History*, 15 (1985), 683-728.

[55] J. Rydström, *Sinners and citizens: bestiality and homosexuality in Sweden, 1880-1950* (Chicago, 2003), 55.

[56] O. Grant, *Migration and inequality in Germany 1870-1913* (Oxford, 2005), 34. Also see the older R. Heberle, 'The causes of rural-urban migration: a survey of German theories', *American Journal of Sociology*, 43.6 (1938), 932-50.

[57] See, in general, M. Bunce, *Rural settlement in an urban world* (London, 1982). For a specific recent study, see F. Collantes, 'The decline of agrarian societies in the European countryside: a case study of Spain in the twentieth century', *Agricultural History*, 81.1 (2007), 76-97.

[58] F. Collantes, *El declivedemográfico de la montana Espanola (1850-2000). ¿Un drama rural?* (Madrid, 2004); F. Collantes & V. Pinilla, 'Extreme depopulation in the Spanish rural mountain areas: a case study of Aragon in the nineteenth and twentieth centuries', *Rural History*, 15 (2004), 149-66.

elderly remainder to support.[59] Not only this, but mass rural-urban migration is also seen by scholars as increasing the vulnerability of cities and towns, as the ranks of the poor become confined to huge slums with poor infrastructure.[60]

1.5 Tainter and 'complex societies'

Much of the existing scholarship on the resilience or vulnerability of settlements focuses on exogenous conditions, or at least 'bad things' which can happen to human habitations. Settlements that were vulnerable to crisis had to contend with an assortment of difficult environmental, political, or economic conditions, whether that was war, famine, climate change, oppressive forces, soil subsidence, deforestation, lawlessness, flooding, taxation, or simply pressure on resources.

Joseph Tainter, however, has suggested that while invasions, crop failures, or environmental degradation may be the direct causes of the collapse of human habitation, the roots of vulnerability are actually inherent in the structure of societies themselves.[61] In his theory on social complexity, Tainter argues that as societies become more complex, they need higher levels of 'energy' input to maintain their increasing levels of complexity. Resilience or vulnerability is then dependent on society to solve its problems.[62] This sort of framework has been used to explain the decline of habitation on Easter Island. According to Tainter's interpretation, the inhabitants erected large statues (*moai*) as a form of religious reverence to their ancestors. It was believed that this display of reverence would in turn be rewarded with future prosperity – thus stimulating an intensification of statue-production. Since the isolated geographical position meant the islanders could not fall back on trade and the market, statue-production disturbed the already-delicate ecosystem, leading to resource-exhaustion through deforestation and increased competititon for

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[59] See the skewed demographic profile in parts of rural Africa where women, children, and the elderly are over-represented in M. Yacoob & M. Kelly, 'Secondary cities in West Africa: the challenge for environmental health and prevention', *Comparative Urban Studies Occasional Paper Series*, 21 (1999), 5. Similarly see distorted populations in Russian villages described in J. Pallot, 'Rural depopulation and the restoration of the Russian village under Gorbachev', *Soviet Studies*, 42.4 (1990), 655.

[60] F. Kruger, 'Taking advantage of rural assets as a coping strategy for the urban poor: the case of rural urban interrelations in Botswana', *Environment & Urbanization*, 10.1 (1998), 119-34; P. Jacobi, 'Environmental problems in Sao Paolo: the challenge for co-responsibility and innovative crisis management', *Journal of Contingencies & Crisis Management*, 5.3 (1997), 131-9; M. Pelling, *The vulnerability of cities: natural disasters and social resilience* (London, 2003), 59.

[61] J. Tainter, *The collapse of complex societies* (Cambridge, 1988).

[62] In line with the thesis developed in the 12 volumes of A. Toynbee, *A study of history* (12 vols, Oxford, 1934-61).

scarce resources used up in reverent display.[63] In his thesis, however, Tainter is explicitly critical of what he judges to be 'simplistic' explanations for vulnerability based on capitalistic over-exploitation of resources.

Figure 1.1 Restored *moai* on Easter Island[64]

1.6 Introducing the theoretical framework of this thesis: society and settlement

This thesis (like Tainter) aims to move away from the conditions impacting upon the fortunes of settlements, and begins to focus on how the arrangement of pre-industrial societies themselves could have made settlements more resilient or vulnerable – in the face of exogenous challenges such as commercialisation, environmental

[63] In line with a body of work emphasizing environmental mismanagement rather than the disturbing effects of outsider influence (i.e. through contact with Europeans). See P. Bahn & J. Flenley, *Easter Island. Earth Island* (London, 1992); J. van Tilburg, *Easter Island: archaeology, ecology and culture* (Washington, 1994); C. Stevenson & S. Haoa, 'Diminishing agricultural productivity and the collapse of ranked society on Easter Island', in *Archaeology, agriculture and identity* (Oslo, 1999), 4-12; J. Diamond, 'Easter Island's end', *Discover*, 16 (1995), 36-45; C. Orliac, 'The wooded vegetation of Easter Island between the early 14th and the mid-17th centuries AD', in C. Stevenson & W. Ayres (eds.), *Easter Island archaeology: research on early Rapanui culture* (Los Osos CA, 2000), 211-20.

[64] Photograph taken by Ian Sewell (July 2006) [creative commons 3.0 license].

degradation, or conflict. However, in contrast to Tainter's work,[65] this approach is performed on a micro-level (more receptive to the actual structures of society) and with recourse to testing through actual empirical research. Indeed, a limitation on much of the 'collapse' literature is that it remains focused on the level of 'grand civilisations', in periods where documentary evidence is sparse or non-existent, and it becomes difficult to verify or test empirically the bold frameworks.[66] Indeed, many scholars are unsure as to whether they agree with Tainter's thesis because (a) they remained unconvinced by the basic wealth of historical evidence and (b) there is little framework set up to actively test his assertions.[67] Probably this is why his thesis has attracted far less public attention than the work of Jared Diamond.

Thus, instead, this thesis should be placed within a growing literature based on more solid historical ground which sees, for example disasters, not as mere natural events but as social processes which test the organisational capabilities of societies in limiting the destabilising effects and moving onto a stage of recovery.[68] Troubled times pushed some pre-industrial societies into creating systems of mutual support and cohesion.[69] In particular, a few scholars have pointed to the positive role of social and economic equality in allowing societies to better deal with potentially disastrous shocks and calamities. It was, after all, Karl Marx who once quipped that the Great Irish Famine 'killed poor devils only'.[70] For example, development economist Amartya Sen used the Bengal famine of 1943 to push forward his thesis that mass starvation was not the result of lack of food but more the result of distorted systems of access to food.[71] More recently this idea has been furthered or added to by

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[65] Where he goes as far as to say that 'factual matters will be discussed, but they are never of major importance'! Tainter, *The collapse of complex societies*, 43.

[66] Some examples include T. Homer-Dixon, *The upside of down: catastrophe, creativity, and the renewal of civilization* (Washington, 2007); G. Schwartz & J. Nichols (eds.), *After collapse: the regeneration of complex societies* (Tuscon, 2006); N. Yoffee & G. Cowgill (eds.), *The collapse of ancient states and civilizations* (Tuscon, 2003).

[67] See some of the unsure reviews in B. Trigger, 'Review', *Man*, 24.2 (1989), 374-5; E. Jones, 'Review', *Economic History Review*, 42.4 (1989), 634; R. Blanton, 'Review', *American Antiquity*, 55.2 (1990), 421-3. For some of the truly negative reviews, see G. Bowerstock, 'Review', *Journal of Field Archaeology*, 18.1 (1991), 119-21.

[68] For example, see K. Tierney, 'From the margins to the mainstream? Disaster research at the crossroads', *Annual Review of Sociology*, 33 (2007), 503-25; P. Blaikie et al. (eds.), *At risk. Natural hazards, people's vulnerability, and disasters* (London, 1997); Pelling, *The vulnerability of cities*.

[69] E. Clark, 'Social welfare and mutual aid in the medieval countryside', *Journal of British Studies*, 33 (1994), 405-6.

[70] K. Marx, *Capital: a critical analysis of capitalist production*, i (New York, 1967), 704.

[71] A. Sen, *Poverty and Famines. An Essay on Entitlement and Deprivation* (Oxford, 1988); A. Sen & J. Drèze, *Hunger and public action* (Oxford, 1989). See also on power, property, and famine, L. Tilly,

Ted Steinberg, who has argued in a somewhat polemical book that natural disasters in American history (a) hit impoverished people harder than wealthier segments of society and (b) could have had their destructive effects reduced if society had been rearranged in a less polarised manner.[72] A further literature has put forward the argument that risks from turbulent environmental events have tended to be greater for the poor, racial and ethnic minorities, the less educated, and the politically disenfranchised.[73]

In this spirit, this thesis places the different arrangements of societies at the forefront of the theoretical framework. In the theoretical framework outlined in chapter two, it is suggested that the way society was organised made a big impact on the strategies those societies devised for exploiting and managing their resources, which in turn dictated the extent to which some settlements were stable and resilient over the long term (perhaps in the face of serious crises) while other settlements were vulnerable to failure and even collapse. A system is devised for (a) identifying particular 'types of pre-industrial societies', (b) linking those societies logically to different strategies for managing resources, and (c) linking the different resource-management strategies to particular settlement outcomes. It is a framework which hopefully can help us understand why some settlements are resilient and others are vulnerable to decline.

The rest of the thesis is laid out as follows. In chapter two, the general theoretical framework is explained in greater detail. From chapter three to chapter seven, this theoretical framework is then tested using empirical research. Each chapter represents a case study of a region in Western Europe between the Middle

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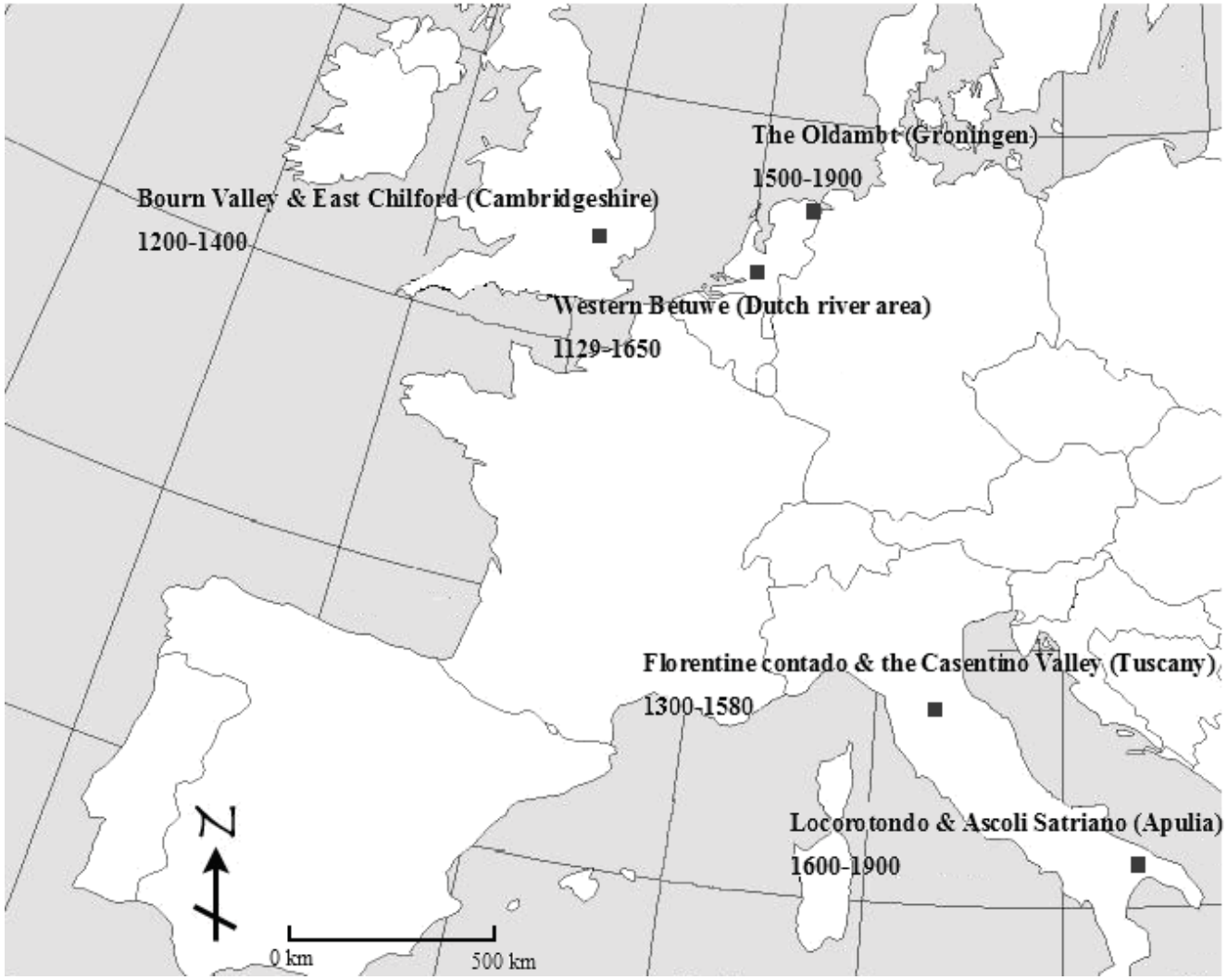
'Food entitlement, famine, and conflict', *Journal of Interdisciplinary History*, 14 (1983), 333-349; J. Walter, 'The social economy of dearth in early modern England', in J. Walter & R. Schofield (eds.), *Famine, disease and the social order in early modern society* (Cambridge, 1989), 81-2; M. Davis, *Late Victorian Holocausts: El Nino famines and the making of the Third World* (London, 2001), 277-8. Sen's interpretation of the Great Bengal Famine of 1943-4 has been somewhat adapted, however, in the recent C. O'Grada, 'The ripple that drowns? Twentieth-century famines in China and India as economic history', *Economic History Review*, 61 (2008), 5-37.

[72] T. Steinberg, *Acts of God. The Unnatural History of Natural Disaster in America* (Oxford, 2000).

[73] T. Cannon, 'Vulnerability analysis and the explanation of 'natural' disasters', in A. Varley (ed.), *Disasters, development and environment* (Chichester, 1994), 13-31; G. Bankoff, G. Frerks & D. Hilhorst (eds.), *Mapping vulnerability: disasters, development and people* (London, 2004); G. Bankoff, 'Constructing vulnerability: the historical, natural and social generation of flooding in metropolitan Manila', *Disasters*, 27 (2003), 224-38; M. Dorsey, 'Globalizing justice: against environmental racism in the age of globalization', in N. Arias & I. Yánez (eds.), *Resistance: a path towards sustainability* (Quito, 2000), 37-50; C. Ballard, 'Drought and economic distress', *Journal of Interdisciplinary History*, 17 (1986), 359-78.

Figure 1.2 Location of the case studies



Ages and the nineteenth century. These case studies have been confined to parts of the Low Countries, England, and Italy, in accordance with the languages and historical expertise of the writer. In each case study, archival manuscript, cartographic, archaeological, and printed primary and secondary source material is used to reconstruct the socio-political structures, the strategies for resource management, and the settlement development between the particular dates chosen. The exact locations and time periods of all the case studies are plotted on the map above. Chapter eight is the final and possibly most important chapter. All the data from the five case studies is laid-out side by side and placed into the theoretical framework drawn up in chapter two. It is here we learn whether it is fair to say that settlement resilience or vulnerability stems from societal organisation itself, rather than mere exposure to differing exogenous conditions such as technology, climate, or markets.

Chapter 2
The resilience and vulnerability of settlements: explaining the theoretical framework

"History may be divided into three movements: what moves rapidly, what moves slowly, and what appears to not move at all".

Fernand Braudel

In this chapter, a new theoretical framework is constructed which may be used to explain how some settlements were resilient and other settlements were vulnerable to decline or crisis in the pre-industrial period. It has three main facets. First, a system is offered for distinguishing and differentiating between a number of basic 'types of pre-industrial society'. Second, it is argued that these distinctive 'types of society' each led to very particular strategies for managing and exploiting their resources, in the face of a number of pressures such as commercialisation and ecological degradation. This section is important because it represents the causal connections between 'types of societies' and 'the ways in which settlements develop'. In the third section, it is argued that these strategies and techniques for managing resources ultimately determined the path in which settlements would develop. In that sense, it suggests that the way society was organised made a big impact on the way resources were handled, which in turn may have dictated to what extent some human habitations were resilient over the long-term against all kinds of exogenous crises while other settlements were highly susceptible to failure and collapse.

2.1 Methodology for identifying the 'types of pre-industrial society'

The essential characteristics of each pre-industrial society were forged through the arrangement of four key configurations. These have been identified as:

A. Property
B. Power
C. Commodity markets
D. Modes of exploitation

The significance of these four configurations is not in their presence or absence per se, but in the way they were arranged. It is suggested here that each of these configurations in a particular pre-industrial society could be assessed as either 'egalitarian' or 'polarised' (i.e. measured in terms of equality), and 'dynamic' or 'persistent' (i.e. measured in terms of capacity for change). So, for example, in one particular pre-industrial society, the configuration of 'power' could be assessed as 'egalitarian-persistent', while in another pre-industrial society 100kms away, the configuration of 'power' could be assessed as 'polarised-dynamic'. The very first question is then, what is meant by these terms? How do we begin to assess each of these configurations within a society as 'egalitarian' or 'polarised', and 'dynamic' or 'persistent'? This is explained below.

A: Property

Egalitarian property configurations were characteristic of pre-industrial societies which divided land up equally. Even though between the Middle Ages and the nineteenth century it would be rare to find any society in the world that had totally equal distributions of land, naturally some societies were more equal than others. The equitable distribution of property sometimes had its origins in egalitarian inheritance practices. Many pre-industrial societies practiced partible inheritance, whereby land and assets were evenly distributed between heirs regardless of age or sex. One of the (some might say unwanted) side-effects of this practice (when combined with population pressure and finite resources) was the proliferation of miniscule holdings which supported nobody.[74] Egalitarian property configurations were not solely about distribution, however. For example, the conditions of property transfer could also be egalitarian if it was mutually-beneficial for all parties involved, as far as conceivably possible. When someone sold a piece of land, they received the market value for it. When land was transferred through leasing or sub-leasing, the leaser was not able to exert any sort of dominant extra-economic power over the tenant (although there were often pre-agreed contractual obligations to fulfil such as keeping buildings in good working order). Tenants could exit contracts by providing notice in advance, without suffering any consequences.

Polarised property configurations were characteristic of pre-industrial societies which had a large proportion of its land consolidated in the hands of just a few individuals or institutions. The distribution of property in the pre-industrial world was frequently highly polarised, in the same way that contemporary society is often inequitable.[75] When property distribution was polarised, large sections of pre-industrial societies lost access to the means of production and had to resort to wage

[74] For example, see M. Segalen, *Fifteen generations of Bretons: kinship and society in lower Brittany 1720-1980* (Cambridge, 1991), 83-4; G. Baer, *A history of landownership in modern Egypt, 1800-1950* (London, 1962), 79-83; M. Meriwether, *The kin who count: family and society in Ottoman Aleppo, 1770-1840* (Austin, 1999), chp 4; L. Berkner, 'The stem family and the development cycle of the peasant household: an eighteenth-century Austrian example', *American Historical Review*, 77 (1972), 398-418; E. Brennan, A. James & W. Morill, 'Inheritance, demographic structure, and marriage: a cross-cultural perspective', *Journal of Family History*, 7 (1982), 289-98; S. Goss, 'Handing down the farm: values, strategies, and outcomes in inheritance practices among rural German Americans', *Journal of Family History*, 21 (1996), 192-217.

[75] For a global overview of pre-industrial and post-industrial disparities in property distribution, see the excellent E. Frankema, *Has Latin America always been unequal? A comparative study of asset and income inequality in the long twentieth century* (Leiden, 2009).

labouring on other peoples' lands. Polarised property distribution may have been exacerbated by unequal inheritance practices. Impartible inheritance often ensured that large estates descended through the same family for generations. In some cases, women were expressly forbidden or discouraged from inheriting land in a patrilineal system.[76] Polarised property distribution also created inequalities within the property transfer process. Chronically indebted smaller landholders who had to sell their land as a last resort were often exploited by large landowners, who recognised the seller's dire situation and paid a paltry sum for it under the market value.[77]

Dynamic property configurations were basically those where change could occur. People could accumulate and consolidate landed estates, and even work their way up the social and economic ladder from sometimes meagre beginnings. Thus, it refers to those pre-industrial societies where social mobility was high (and land was frequently a status symbol). An essential facet of a dynamic property configuration was a fluid and flexible land market, where land could be transferred between parties unhindered. Integral to a dynamic land (or lease) market was the establishment of clear, inalienable property rights, perhaps rooted in the formalisation of 'Roman Law'.[78] Clear property rights reduced the number of potential 'stakeholders' in a piece of land, reducing the barriers for transfer, and this was made more secure by, for example, registration of transactions in public courts from the late Middle ages onwards.[79] Some have suggested that these conditions paved the way for the

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[76] S. Cohn, *Women in the streets: essays on sex and power in Renaissance Italy* (Baltimore, 1996), 8-15; R. Wheaton, 'Family and kinship in Western Europe: the problem of the joint family household', *Journal of Interdisciplinary History*, 5 (1975), 625-7. Even when women received dowries, often they were managed by men. See, T. Kuehn, 'Understanding gender inequality in Renaissance Florence: personhood and gifts of maternal inheritance by women', *Journal of Women's History*, 8 (1996), 58-80.

[77] M. Chakrabarti, *The famine of 1896-1897 in Bengal: availability or entitlement crisis?* (New Delhi, 2004), 132.

[78] B. van Bavel, *Manors and markets: economy and society in the Low Countries, 500-1600* (Oxford, 2010), 168.

[79] B. van Bavel, 'The organisation and rise of land and lease markets in northwestern Europe and Italy, c.1000-1800', *Continuity & Change*, 23 (2008), 13-53; 'The land market in the North Sea area from a comparative perspective, 13th-18th centuries', in S. Cavaciocchi (ed.), *Il mercato della terra secc. XIII-XVIII* (Prato, 2003), 130-1; E. Huertas, 'Between law and economy: 'divided property' and land rent market in Tuscany, twelfth-thirteenth centuries', in P. Schofield & G. Beaur (eds.), *Property rights, land market and economic growth in the European countryside (13th-14th centuries)* (Turnhout, 2011); L. Feller, 'Quelques problèmes liés à l'étude du marché de la terre durant le Moyen Age', in Cavaciocchi (ed.), *Il mercato*, 21-45; C. Wickham, 'Land sales and land market in the eleventh century', in *Land and power: studies in Italian and European social history, 400-1200* (London, 1994), 257-74. For registration in public courts, see F. Ketelaar, 'Van pertinent register en ordentelijk protocol: overdracht van onroerend goed in de tijd van de Republiek', in *De levering van onroerend goed. Vijf opstellen over*

emergence of agrarian capitalism in Europe.[80] Dynamic property configurations were also sometimes helped by flexible inheritance practices. Indeed, no society was a complete helpless prisoner of inheritance custom as Malthusian perspectives have often dictated.[81] Societies often used tactical or even delayed marriages,[82] non-receiving heirs were put through institutions such as religious orders,[83] and inheritance rights were even surrendered through side-payments.[84] These flexible inheritance practices often required a less familial and generational attachment to particular farms and pieces of land.[85]

Persistent property configurations characterised those pre-industrial societies where the social distribution of landownership was very difficult to shift. It could easily have applied as much to egalitarian societies with little economic or social hierarchy as to polarised societies with all the land in the hands of the powerful or wealthy. Property could not be easily transferred between parties. A key facet in this was the absence of clear, inalienable property rights. In medieval Europe, a basic foundation of the feudal system was the development of patronage and the layers of 'ownership'. Indeed, it may even be incorrect to speak of 'landownership'; ownership was not over 'land' per se but over a complicated bundle of rights and obligations associated with the land.[86] Each piece of land had a number of different stakeholders

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de overdracht van onroerend goed vanaf het Romeinse recht tot het Nieuw Burgerlijk Wetboek (Deventer, 1985), 39-42.

[80] R. Brenner, 'The agrarian roots of European capitalism', *Past & Present*, 97 (1982), 16-113; 'Agrarian class structure'.

[81] M. Innes, *State and society in the early Middle Ages: the middle Rhine Valley, 400-1000* (Cambridge, 2001), 81; Z. Razi, 'Family, land and the village community in late medieval England', in T. Aston (ed.), *Landlords, peasants and politics in medieval England* (Cambridge, 1987), 366-7. Other works have called for a reduced importance put on inheritance practices, for example, see R. Emigh, 'Property devolution in Tuscany', *Journal of Interdisciplinary History*, 33.3 (2003), 420.

[82] M. Mundy, 'The family, inheritance, and Islam: a re-examination of the sociology of Farā'id Law', in A. Al-Azmeh (ed.), *Islamic law: social and historical contexts* (London, 1988), 49-65; J. Brown, *In the shadow of Florence: provincial society in Renaissance Pescia* (New York, 1982), 40-1.

[83] A. Molho, *Marriage alliance in late medieval Florence* (Cambridge, 1994), 344-5.

[84] D. Powers, 'The Islamic inheritance system: a socio-historical approach', in C. Mallat & J. Connors (eds.), *Islamic family law* (London, 1990), 19-27.

[85] D. Dansma & J. Kok, 'Ingedroogde harten? Partnerkeuze en sociale reproductie van de Noord-Hollandse boerenstand in de negentiende en vroeg-twintigste eeuw', in J. Kok & M. van Leeuwen (eds.), *Genegenheid en gelegenheid. Twee eeuwen partnerkeuze en huwelijk* (Amsterdam, 2005), 285-308; J. Whittle, 'Individualism and the family-land bond: a reassessment of land transfer patterns along the English peasantry, c.1270-1580', *Past & Present*, 160 (1998), 25-63.

[86] B. van Bavel & R. Hoyle, 'Introduction: social relations, property and power in the North Sea Area, 500-2000', in *Rural economy and society in North-western Europe, 500-2000* (Turnhout, 2010), 12; A. Alchian & H. Demsetz, 'The property rights paradigm', *Journal of Economic History*, 33.1 (1973), 17.

or jurisdictions, preventing easy transfer.[87] Furthermore, land sometimes was only transferred with prior permission of lords. Lords in England were fearful of the transfer of free land to customary tenants in case the status of the land changed over time and they lost their labour obligations.[88] Other blocks to land transfer were the much despised tallages and recognitions, which made the transfer of land a costly process, especially where the manorial system was strong.[89] In North-West Germany, a clear division can be made between the coastal marshes where the land transactions were common due to few feudal ties, and the stagnant land market in the manorialised districts.[90] There were also occasions where societies had families with strong (perhaps even emotional) attachments to their land, and in that regard were not willing to part with it easily.[91]

B: Power

Egalitarian configurations of power characterised those pre-industrial societies which knew great freedoms: extra-economic exactions were low or absent, jurisdictional

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[87] See for example P. Chorley, *Oil, silk and enlightenment. Economic problems in XVIIIth century Naples* (Naples, 1965), 11-3; O. Saito, 'Land, labour and market forces in Tokugawa Japan', *Continuity & Change*, 24.1 (2009), 170.

[88] C. Brooke & M. Postan (eds.), *Carte nativorum: a Peterborough Abbey cartulary of the fourteenth century* (Northampton, 1960), xxix; P. Schofield, *Peasant and community in medieval England 1200-1500* (Basingstoke, 2003), 65-9.

[89] L. Genicot, *L'économie rurale Namuroise au Bas Moyen Age*, iii (Louvain, 1982), 78-9; E. Thoen, *Landbouwekonomie en bevolking in Vlaanderen gedurende de late Middeleeuwen en het begin van de moderne tijden. Testregio: de kasselrijen van Oudenaarde en Aalst, eind 13de – eerste helft van de 16de eeuw* (Gent, 1988), 411.

[90] S. Brakensiek, 'Farms and land – a commodity? Land markets, family strategies and manorial control in Germany (18th-19th centuries)', in B. van Bavel & P. Hoppenbrouwers (eds.), *Landholding and land transfer in the North Sea are (late Middle Ages – 19th century)* (Turnhout, 2004), 218-34; W. Achilles, *Vermögensverhältnisse Braunschweigischer Bauernhöfe im 17. und 18. Jahrhundert* (Stuttgart, 1965).

[91] H. De Haan, *In the shadow of the tree. Kinship, property and inheritance among farm families* (Amsterdam, 1994). Much literature focuses on the transfer of property between kin rather than outside parties. See, D. Sabean, *Propery, production, and family in Neckarhausen, 1700-1870* (Cambridge, 1990); M. Dribe & C. Lundh, 'Gender aspects of inheritance strategies and land transmission in rural Scania, Sweden, 1720-1840', *The History of the Family*, 10 (2005), 293-308; L. Alos, 'When there was no male heir: the transfer of wealth through women in Catalonia (the pubilla)', *Continuity & Change*, 20 (2005), 27-52; C. Fertig & G. Fertig, 'Bäuerliche Erbpraxis als Familienstrategie. Hofweitergave im Westfalen des 18. und 19. Jahrhunderts', in S. Brakensiek, M. Stolleis & H. Wunder (eds.), *Generationengerechtigkeit. Normen und Praxis im Erb- und Ehegüterrecht 1500-1850* (Berlin, 2006), 163-87; A. Fauve-Chamoux, 'Family reproduction and stem-family system: from Pyrenean valleys to Norwegian farms', *The History of the Family*, 11 (2006), 171-84.

control and coercion was minimal, and potential interest groups lacked the tools to perpetuate their power. Many societies which experienced more egalitarian distributions of power were founded in Western Europe from the high Middle Ages onwards, where land reclamation created conditions of personal, legal, and economic freedom for colonists. In a hugely influential article published over 50 years ago in the *American Historical Review*, Bryce Lyon introduced us to his connection between 'medieval real estate developments and freedom' by noting that "for well over a hundred years historians specializing in agrarian institutions of the Middle Ages have suggested that the vast land reclamation characterizing the eleventh and twelfth centuries in western Europe contributed to the emancipation of the common man".[92] The egalitarian configuration of power often had its origins in the favourable distribution of concessions and freedoms granted to colonists.

For example, in the Low Countries, territorial lords such as the Bishop of Utrecht or the Count of Flanders managed to usurp complete regalian rights over vast expanses of wasteland after the collapse of the Carolingian Empire in the tenth century.[93] Rather than reclaiming these waste lands to economically exploit them directly, territorial lords looked to colonise these new lands in order to broaden their territorial area, thereby expanding their tax base. The consequences of this were highly significant for future development within parts of the coastal Low Countries. Territorial lords such as the Bishop of Utrecht lured colonists to the scarcely-inhabited Holland marshes by offering concessions such as personal freedoms from serfdom and full peasant property rights to the land.[94] The rural people that reclaimed the Holland peat lands between the tenth and fourteenth centuries never knew of the manor or signorial dues.[95] In fact, many of the colonists in the Holland peat-lands originated from heavily manorialised societies and were looking to escape the constrictions of serfdom, further inland (for example in the Guelders river

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[92] B. Lyon, 'Medieval real estate developments and freedom', *American Historical Review*, 63.1 (1957), 47.

[93] Lyon, 'Medieval real estate', 51; E. Thoen, 'The Count, the countryside and the economic development of the towns in Flanders from the eleventh to the thirteenth century. Some provisional remarks', in E. Aerts et al. (eds.), *Studia historica oeconomica: liber amicorum Herman van der Wee* (Louvain, 1993), 260-4.

[94] H. van der Linden, *De cope: bijdrage tot de rechtgeschiedenis van de openlegging der Hollands-Utrechtse laagvlakte* (Assen, 1956), 160-82; 'Het platteland in het Noordwesten met de nadruk op de occupatie circa 1000-1300', *Algemene Geschiedenis der Nederlanden*, 2 (1982), 48-82; P. Henderikx, 'Die mittelalterliche Kultivierung der Moore im Rhein-Maas-Delta (10.-13. Jahrhundert)', *Siedlungsforschung*, 7 (1989), 67-87.

[95] J. de Vries & A. van der Woude, *The first modern economy: success, failure and perserverence of the Dutch economy, 1500-1815* (Cambridge, 1997), 159-65.

area).[96] Each colonist received a standardised strip of land of his own (arranged in a parallel fashion with the farmhouse at the end of it) but they also enjoyed favourable jurisdictions over the waste (known as '*recht van opstrek*') which allowed all colonists to continue to reclaim as much of the marshes as they wanted by extending their linear plots, until they met up with a natural boundary or were stopped by someone else's property.[97] The same process can be traced for much of the Frisian and German coastal marshes too.[98] As a result of the reclamation of the marshes, these societies knew great personal freedoms and secure rights to their lands with few onerous obligations. Similar concessions and freedoms (although not nearly to the same extent) also guided the German colonisation process into the Slavic territories of Eastern Europe.[99]

Whereas reclamation through the manorial or feudal context often necessitated and promoted unfreedom, public territorial authorities did not require this same personal control over labour and surplus. Village communities in these free societies often had great direct control over things like poor relief, judicial affairs, and water management, as well as collecting taxes, organizing military duties, and maintaining internal order. Jurors could be elected as representatives of the community in local courts, and villages in free societies frequently developed their

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[96] van Bavel, *Manors and markets*, 86-7.

[97] See J. de Vries, *The Dutch rural economy in the Golden Age, 1500-1700* (New Haven, 1974), 56.

[98] K. Brandt, 'Die mittelalterliche Siedlungentwicklung in der Marsch von Butjadingen (Landkreis Wesermarsch). Ergebnisse archaologischer Untersuchungen', *Siedlungforschung*, 2 (1984), 123-46; J. Ey, 'Late medieval and early-modern reclamation of marsh lands: the role of the state and of village communities. A case-study of the north-western Weser-marshes under the Counts of Oldenburg', in H-J., Nitz (ed.), *The medieval and early-modern rural landscape of Europe under the impact of the commercial economy* (Göttingen, 1987), 214-5; E. Wassermann, 'Opstreknederzettingen in Oost-Friesland', *Historisch-Geografisch Tijdschrift*, 7 (1989), 18-27; P. Hoppenbrouwers, 'Grondgebruik en agrarische bedrijfsstructuur in het Oldambt na de vroegste inpolderingen (ca. 1630 – ca. 1720)', in J. Elerie & P. Hoppenbrouwers (eds.), *Het Oldambt, deel 2. Nieuw visies op geschiedenis en actuel problemen* (Groningen, 1991), 73-95; F. Petri, 'Entstehung und Verbreitung der niederländischen Marschenkolonisation in Europa', in W. Schlesinger (ed.), *Die deutsche Ostsiedlung des Mittelalters* (Sigmaringen, 1975), 695-754.

[99] The best general work being R. Bartlett, *The making of Europe: conquest, colonisation and cultural change, 950-1350* (London, 1993). Also see, G. Richter, 'Kulturlandschaft und Wirtschaft', in H. Heckmann (ed.), *Mecklenburg-Vorpommern. Historische Landeskunde Mitteldeutschlands* (Würzburg, 1989), 129; W. Ribbe, 'Die Anfänge von Berlin/Colln als Forschungsproblem', *Jahrbuch für die Geschichte Mittel- und Ostdeutschlands*, 34 (1985), 7; L. Veit, *Passau: Das Hochstift. Historischer Atlas von Bayern* (Munich, 1978), 287-8, 442-3; H-J. Nitz, 'Planmäßige Siedlungsformen zwischen dem österreichischen Waldviertal und dem Passauer Abteiland', *Ostbairische Grenzmarken*, 27 (1985), 61.

own by-laws.[100] Societies with egalitarian distributions of power would often revolt if encroachments were made into their perceived rights for self-government and independence.[101] They were often helped by their reclamation contexts; territorial lords as public authorities often supported the position of colonists in direct antagonism to the powers of signorial lords. The village communities as political bodies often overlapped with the parish boundaries of the church or even institutions necessary for the management of water.[102]

Polarised power configurations were those where dominant groups used whatever tools necessary to maintain a hold over the rest of society. Many medieval communities were exposed to harsh exactions and onerous jurisdictions, only weakening in England, parts of France and Germany, and Scandinavia, after the Black Death.[103] In the harshest manorialised areas of Europe such as Central England or Lorraine and Alsace, as well as owing fealty to the lord, tenants had to perform a number of customary works (*corvées*) on manorial demesnes and had to pay customary death duties such as the heriot, ask permission for marriage between servile women (merchet), and migration was sometimes restricted.[104] Dominant lords laid out plots for their subordinate tenants in real 'landscapes of lordship'.[105] The

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[100] P. Hoppenbrouwers, 'Op zoek naar de 'kerels'. De dorpsgemeente in de dagen van graaf Floris V', in D. de Boer, E. Cordfunke & H. Sarfatij (eds.), *Wi Florens…De Hollandse graaf Floris V in de samenleving van de dertiende eeuw* (Utrecht, 1996), 230-1; W. Ehbrecht, 'Gemeinschaft, Land und Bund im Friesland des 12. bis 14. Jahrhunderts', in H. van Lengen (ed.), *Die Friesische Freiheit des Mittelalters: Leben und Legende* (Aurich, 2003), 154-60.

[101] H. Schmidt, 'Hochmittelalterliche Baueraufstände im südlichen Nordseekustengebiet', in W. Rösener (ed.), *Grundherrschaft und bäuerliche Gesellschaft im Hochmittelalter* (Göttingen, 1995), 416-25.

[102] van Bavel, *Manors and markets*, 97.

[103] For the weakening of manorial structures and lordly jurisdictions in Europe after the Black Death, see C. Dyer, *An age of transition? Economy and society in England in the later Middle Ages* (Oxford, 2005); 'The ineffectiveness of lordship in England, 1200-1400', *Past & Present,* 195.2 (2007), 69-86; G. Bois, *Crise du féodalisme. Economie rurale et démographie en Normandie orientale du début du 14e siècle au milieu du 16e siècle* (Paris, 1974); R. Hilton, 'A crisis of feudalism?', *Past & Present*, 80 (1978), 3-19; T. Iversen & R. Myking (eds.), *Land, lords and peasants. Peasants' right to control land in the Middle Ages and the early modern period – Norway, Scandinavia and the Alpine region* (Trondheim, 2005), 20; L. Genicot, 'Crisis: from the Middle Ages to modern times', in *Cambridge economic history of Europe*, i (Cambridge, 1966), 703-21.

[104] E. Searle, 'Seigneurial control of women's marriage: the antecedents and function of merchet in England', *Past & Present*, 82 (1979), 3-43; R. Faith, 'Seigneurial control of women's marriage', *Past & Present*, 99 (1983), 133-48; M. Postan & J. Titow, 'Heriots and prices on Winchester manors', in M. Postan (ed.), *Essays on medieval agriculture and general problems of the medieval economy* (Cambridge, 1973), 186-213.

[105] See, R. Faith, *The English peasantry and the growth of lordship* (London, 1997); A. Verhulst, *The Carolingian economy* (Cambridge, 2002).

physical remants of signorial dominance in Europe were reflected, for example, in the tradition of castle-building from around the tenth century onwards, and particularly associated with Norman territorial advances in the eleventh and twelfth centuries.[106] In Eastern Europe it has even been argued that coercion and consolidation of power over subordinates increased after the Middle Ages (known as the Second Serfdom), and other scholars have noted the late growth of *corvée* labour in Byzantium.[107]

Polarised power configurations did not end with manorial or signorial contexts, however. In the late Middle Ages, the practice of serfdom was on the wane in Europe, but in many places newly repressed societies emerged out of land colonisation conducted through the framework of an exploitative relationship between cities and the countryside. As these urban agglomerations grew in size, number and stature, the numbers of 'non-productive' or dependent citizens also grew.[108] Cities realised they had to (a) create more direct and explicit legal relationships with their hinterlands, and (b) exploit these hinterlands more intensively. In that sense, urban institutions, governments and burghers became the

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[106] J-M. Martin, 'Note sur l'habitat fortifié medieval en Pouille', in A. Bazzana, P. Guichard & J-M, Poisson (eds.), *Habitats fortifiés et organisation de l'éspace en Méditerranée medieval* (Paris, 1983), 105-8; G. Loud, 'Continuity and change in Norman Italy: the Campania during the eleventh and twelfth centuries', *Journal of Medieval History*, 22 (1996), 313-43.

[107] R. Brenner, 'Economic backwardness in eastern Europe in light of developments in the West', in D. Chirot (ed.), *The origins of backwardness in eastern Europe* (Berkeley, 1989), 44; J. Kochanowicz, 'The Polish economy and the evolution of dependency', in Chirot (ed.), *Backwardness*, 92-131; T. Robisheaux, *Rural society and the search for order in modern Germany* (Cambridge, 1989); L. Zytkowicz, 'Trends of agrarian economy in Poland, Bohemia and Hungary from the middle of the fifteenth to the middle of the seventeenth century', in A. Maçzak, H. Samsonowicz & P. Burke (eds.), *East-Central Europe in transition. From the fourteenth to the seventeenth century* (Cambridge, 1985), 59-83; P. Kriedte, *Peasants, landlords and merchant capitalists: Europe and the world economy, 1500-1800* (Oxford, 1983), 69; A. Laiou, 'The agrarian economy, thirteenth-fifteenth centuries', in *The economic history of Byzantium* (Washington, 2007), 311-77. Also in Catalonia, see P. Freedman, *The origins of peasant servitude in medieval Catalonia* (Cambridge, 2004), 174-7. However the extent of a 'second serfdom' has now been questioned in M. Cerman, 'Social structure and land markets in late medieval central and east-central Europe', *Continuity & Change*, 23 (2008), 55-100; W. Hagen, 'Village life in east-Elbian Germany and Poland, 1400-1800: subjection, self-defence, survival', in T. Scott (ed.), *The peasantries of Europe from the fourteenth to the eighteenth centuries* (London, 1998), 145-89; J. Peters (ed.), *Gutsherrschaftsgesellschaften im europäischen Vergleich* (Berlin, 1997); M. Cerman & R. Luft (eds.), *Untertanen, Herrschaft und Staat in Böhmen und im 'Alten Reich'* (Munich, 2005); M. Aymard, 'L'Europe moderne: féodalité ou féodalités?', *Annales*, 36 (1981), 426-35.

[108] For example, for Florence's need to feed itself, see C. de la Roncière, 'Alimentation et ravitaillement à Florence au XIVe siècle', *Archeologia Medievale*, 8 (1981), 185. For Verona see, A. Castegnetti, 'Primi aspetti di politica annonaria nell'Italia comunale. La bonifica della "palus comunis Verone" (1194-1199)', *Studi Medievali*, 13 (1974), 363-481.

new 'feudal lords' of the late Middle Ages and early modern period in Europe.[109] Cities tried to settle people in uninhabited areas to reclaim unproductive wastes in order to produce enough food to support their swelling non-agricultural populations. In many regions of the pre-industrial Europe, urban authorities tightened their jurisdictions over their close countryside, levying taxes in kind and coin, and forcing rural communities into a more subordinate position.[110]

Polarised power configurations were also a feature of geographical areas colonised by strong centralised states looking to implement and enforce sophisticated systems of taxation. These were to be found, in particular, all across the early medieval Middle East where water was brought to former arid soils in delicate ecological balances. Indeed, in Iraq, agricultural expansion and the extension of cultivation was encouraged by powerful centralised states, which used reclamation as a framework for legitimising new arrangements of taxation.[111] In the late Sasanian period (fifth-sixth centuries), the state used expansion through irrigation works to crystallise and expand its taxation reach.[112] Water was taken from rivers such as the Tigris and the Euphrates using networks of canals, and brought to dry wastelands, fuelling an expansion of settlement.[113] Irrigated agriculture collapsed with the end of

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[109] S. Epstein, 'Cities, regions and the late medieval crisis: Sicily and Tuscany compared', *Past & Present*, 130 (1991), 3-50; 'Town and country: economy and institutions in late medieval Italy', *Economic History Review*, 46.3 (1993), 453-77.

[110] The best general works of reference on this are P. Jones, *The Italian city-state: from commune to signoria* (Oxford, 1997); G. Tabacco, *Egemonie sociali e strutture del potere nel Medioevo italiano* (Turin, 1979). On the exploitative relationship between city and the countryside, see T. Scott, *Freiburg and the Breisgau: town-country relations in the Age of Reformation and peasants' war* (Oxford, 1986), 31-46; A. Castagnetti, *Le comunità rurali dalla soggezione signorile alla giurisdizione del comune cittadino* (Verona, 1983); R. Paping, 'Parasiteren op het platteland?', in G. Collenteur, M. Duijvendak, R. Paping, & H. de Vries (eds.), *Stad en regio* (Assen, 2010), 112; S. Blanshei, *Perugia, 1260-1340: conflict and change in a medieval Italian urban society* (Philadelphia, 1976), 15, 61; O. Redon, *Uomini e comunità del contado senese nel duecento* (Siena, 1982), 217.

[111] M. Campopiano, 'Irrigation and taxation in Iraq, 6th to 10th century' (unpublished paper, Utrecht University, 2009), 3. Also see more generally, M. Campopiano, 'Land tenure, land tax and social conflict in Iraq from the late Sasanian to the early Islamic period (fifth to ninth centuries)', in P. Sijpesteijn (ed.), *Late antiquity and early Islam. Continuity and change in the Mediterranean, 6th-10th century C.E.* (Leiden 2012), in print; 'State, land tax and agriculture in Iraq from the Arab Conquest to the crisis of the Abbasid Caliphate (seventh-tenth centuries)', *Studia Islamica*, 1 (2011), 1-29.

[112] R. McAdams, 'Intensified large-scale irrigation as an aspect of Imperial policy: strategies of statecraft on the late Sasanian plain', in J. Marcus & C. Stanis (eds.), *Agricultural strategies* (Los Angeles, 2006), 17-37.

[113] See the archaeological evidence discussed in R. McAdams, *Land behind Baghdad. A history of settlement on the Diyala plain* (Chicago, 1965); *Heartland of cities*;R. McAdams & H. Nissen, *The Uruk countryside. The natural setting of urban societies* (Chicago, 1972). Also for the written evidence on the

the Sasanian Empire, though the emergence of a second centralised state after the Arab Conquest re-stimulated a similar system of land reclamation and taxation.[114] Some reclamation projects were completed by Umayyad Abbasid caliphs, anxious to extend their financial bases by increasing direct control of their royal estates.[115] Other lands were colonised through land grants, whereby cultivators were given tax cuts for reviving land out of tillage. Generally, this crystallised the system of large estates, as only the wealthy had the resources to undertake this difficult work.[116] Through these reclamation works, a system of nepotism and distorted patronage was created with large tracts of waste going into a small favoured aristocratic elites' hands – often to the ruin of previous smallholders.[117]

Dynamic power configurations applied to those pre-industrial societies where the balance of power was very changeable and there was constant competition for dominance. In some places power was divided between a number of social groups such as territorial lords, urban institutions, local signorial lords, urban burghers, and rural communities, for example in medieval Flanders where concern was rising over the heightened control cities were having over production in the countryside through guilds.[118] Often the city had rival competitors for jurisdiction and control over the countryside from rural aristocrats, and sometimes even had competition from other cities or towns.[119] Indeed in sixteenth century Holland, 40 percent of the rural lands was in urban hands but spread between urban burghers and institutions from a

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Persian Kings investment in water infrastructures, see F. Rahimi-Laridjani, *Die Entwicklung der Bewässerungslandwirtschaft im Iran bis in sasandisch-frühislamische Zeit* (Wiesbaden, 1988), 457; M. Morony, 'Landholding in seventh-century Iraq: late Sasanian and early Islamic patterns', in A. Udovitch (ed.), *The Islamic Middle East, 700-1900. Studies in economic and social history* (Princeton, 1981), 155-7. On the expansion of settlement, see B. Dignas & E. Winter, *Rome and Persia in late antiquity. Neighbours and rivals* (Cambridge, 2007), 108-9.

[114] Campopiano, 'Irrigation', 21.

[115] I. Lapidus, 'Arab settlement and economic development of Iraq and Iran in the Age of Umayyad and early Abbasid Caliphs', in Udovitch (ed.), *The Islamic Middle East*, 183-7.

[116] E. Ashtor, *A social and economic history of the Near East in the Middle Ages* (London, 1976), 46; M. Morony, 'Landholding and social change: lower al'-Iraq in the early Islamic period', in T. Khalidi (ed.), *Land tenure and social transformation in the Middle East* (Beirut, 1984), 209-22.

[117] Campopiano, 'Irrigation', 24.

[118] D. Nicholas, 'Town and countryside: social and economic tensions in fourteenth-century Flanders', *Comparative Studies in Society & History*, 10.4 (1968), 458-85; *Town and countryside: social, economic, and political tensions in fourteenth century Flanders* (Bruges, 1971), 152-5. Also see W. Blockmans, 'Stadt, Region und Staat: ein Dreiecksverhältnis: der Kasus der Niederlande im 15. Jahrhundert', in F. Seibt & W. Eberhard (eds.), *Europa 1500* (Stuttgart, 1987), 211-26.

[119] See the clash of rural and urban interests in D. Waley, *The Italian city-republics* (New York, 1988), 84-5.

number of towns; no single city domination.[120] Elsewhere all across Europe, kings and territorial lords or princes had to cede away more and more of their power and land in fiefdom to signorial lords, in the hope of securing a wider base of political patronage and military favour.[121] Finally some societies with dynamic power balances were those with strong village communities and associations, and were prepared to resist and revolt against perceived injustices committed by urban or rural landlords. Some of these used peaceful techniques and adopted the political language of their superiors to achieve political objectives,[122] while other revolts were more short-term expressions of temporary disaffection.[123]

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[120] B. van Bavel, 'Markets for land, labor, and capital in northern Italy and the Low Countries, twelfth to seventeenth centuries', *Journal of Interdisciplinary History*, 41.4 (2011), 514; de Vries, *The Dutch rural economy*, 45-6.

[121] A general process well discussed in Duby, *L'économie rurale*.

[122] Some revolts had overaching long term political objectives as noted in B. van Bavel, 'Rural revolts and structural change in the Low Countries, thirteenth-early fourteenth centuries', in R. Goddard, J. Langdon & M. Müller (eds.), *Survival and discord in medieval society. Essays in honour of Christopher Dyer* (Turnhout, 2010), 249-67; M. 't Hart, 'Een boerenopstand op Walcheren. De strijd om het waterschap 1655-1671', *Tijdschrift voor Sociale Geschiedenis*, 20 (1994), 265-81; I. Harvey, *Jack Cade's rebellion of 1450* (Oxford, 1991); E. Hobsbawm & G. Rude, *Captain Swing* (London, 1969); H. Neveux, *Les révoltes paysannes en Europe: XIVe-XVIIe siècle* (Paris, 1997); G. Pécout, 'La polisation des paysans au XIXe siècle', *Histoire et Sociétés Rurales*, 2 (1994), 279-92; O. Knottnerus, 'Boeren en landarbeiders in het Oldambt: de landarbeidersstaking van 1929 en haar voorgeschiedenis', <http://www.xs4all.nl/~ottoknot/werk/>; B. Poulsen, 'Schleswigsche Bauern und europäischer Markt. Ein Aufstand aus dem Jahre 1472', *Demokratische Geschichte*, 4 (1989), 9-26; K. Katajala, 'Against tithes and taxes, for king and province. Peasant unrest and medieval Scandinavian political culture', in *Northern revolts. Medieval and early modern unrest in the Nordic countries* (Helsinki, 2004), 32-52.

[123] The extent to which revolts had political objectives or were temporary and opportunistic expressions of disaffection has been debated in R. Hilton, *Bondsmen made free. Medieval peasant movements and the English rising of 1381* (London, 1973), 214-32. Taxes often provoked spontaneous uproar from below, for example see J. Nicolas, *La rebellion française: mouvements populaires et conscience sociale, 1661-1789* (Paris, 2002). Some revolts were short-term and linked to perceived local injustices, for example in K-L. Lorenzen-Schmidt, 'Gutsherrchaft über reiche Bauern. Übersicht über bäuerliche Widerständigkeit in den Marschgütern an der Westküste Schleswig-Holsteins und Jütlands', in J. Peters (ed.), *Gutsherrschaft als Soziales Modell: vergleichende Betrachungen zur Funktionsweise frühneuzeitlicher Agrargesellschaften* (München, 1995), 261-78; C-H. Hauptmeyer, 'Bäuerlicher Widerstand in den Grafschaften Schaumburg-Lippe, im Fürstentum Calenberg und im Hochstift Hildesheim. Zur Frage der qualitativen Veränderung bäuerlicher Opposition am Ende des 18. Jahrhunderts', in W. Schulze (ed.), *Aufstände, Revolten, Prozesse. Beiträge zu bäuerlichen Widerstandsbewegungen im frühneuzeitlichen Europa* (Stuttgart, 1983), 217-32. In some more stratified societies, wealthy farmers and peasants sided with the elites against the community, for example in J. Mooser, *Ländliche Klassengesellschaft, 1770-1848: Bauern und Untschichten, Landwirtschaft und Gewerbe im östlichen Westfalen* (Göttingen, 1984).

Persistent power configurations could not be shifted easily. It was either the case of one dominant group having very little competition from other rival forces or that there was a complete power vacuum with no one to fill it. More often pre-industrial societies experienced the first option. For example, one of the facets of the stability in polarised power structures in Southern Italy well into the eighteenth century was that even though 'feudalism' was in terminal decline, the barons were still able to retain their power over the long-term by consolidating landed estates and using violence and the imperfections in the labour market to put down any potentially destabilising groups.[124] It has also been recently shown that the old large landowning monasteries of Western Europe which were able to retain power for long periods of time over their immediate environments were those which did not have to make concessions to lay aristocrats in the late Middle Ages, but furthermore, were located in areas free from rising urban interference (burgher consolidation of landownership or urban jurisdictions).[125] Those pre-industrial societies which were less influenced by urbanisation tended to have more stable power structures and undisturbed hierarchies.

C: Commodity markets

Egalitarian marketing frameworks for commodities were not dominated by powerful interest groups. Institutional barriers and exclusive privileges were almost-non existent in egalitarian configurations.[126] In these egalitarian market configurations, there were no restrictions on certain people having to use certain trading venues. 'Outsiders' had freedom and accessibility to this marketing structure, and very few people were excluded from the exchange process.[127] Institutions were set up to ensure good contract enforcement between producers and traders, often through courts.[128]

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[124] T. Astarita, *The continuity of feudal power: the Caracciolo di Brienza in Spanish Naples* (Cambridge, 1992); E. Dal Lago, *Agrarian elites: American slaveholders and southern Italian landowners, 1815-1861* (Louisiana, 2005).

[125] D. Curtis, 'The late-medieval decline of 'old' monasteries and abbeys in Western Europe: inevitable or avoidable?', *Utrecht University: Global Economic History Series Working Papers*, 29 (2012), 16-20. There was likely a negative relationship between late-medieval landownership of the old ecclesiastical institutions and the level of urbanisation in a particular territory, as suggested recently in A. Rijpma, 'Funding public services through religious and charitable foundations in the late-medieval Low Countries' (unpublished PhD thesis, Utrecht University, 2012), 102-13.

[126] O. Gelderblom, 'The decline of fairs and merchant guilds in the Low Countries, 1250-1650', *Jaarboek voor Middeleeuwse Geschiedenis*, 7 (2004), 199-238.

[127] J. Dijkman, *Shaping medieval markets: the organisation of commodity markets in Holland, c. 1200-1450* (Leiden, 2011), 89-96.

In contrast, polarised configurations of markets for commodities were entirely dominated by interest groups. Cities and towns created market monopolies or coerced the flow of commodities into one particular trading centre.[129] Rural producers were forced to sell their goods at this designated market rather than search for the best price in other trading venues, and would suffer punishments if found disobeying the legislation. Later in the medieval period, it should come as no surprise that urban-stimulated land reclamation which led to the formalisation of urban jurisdiction over wider rural *contadi* also led to the emergence of highly regulated and monopolised networks of markets. Frequently colonists who were told where and what to cultivate were also told they had to sell their output in specialised city markets.[130] Cities tended to take exclusive and prioritised access to the food supply of their hinterlands, essentially enforcing monopolies from the high Middle Ages up to the sixteenth century (and sometimes beyond).[131] Price controls, bans on exporting, and forced sales during times of scarcity occurred in rural areas around Bologna and Pavia, for example.[132] Inevitably, this led at times to unpredictable market regulations and frequently high transaction costs.[133] In some cases, traders realised the poverty of the buyers and their reliance on their product, thus setting exorbitant prices.[134] Some towns were given charters of liberties to recognise the fact that they were the

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[128] An issue discussed in A. Greif, 'Institutions and impersonal exchange: from communal to individual responsibility', *Journal of Institutional & Theoretical Economics*, 158 (2002), 168-204. Though informal checks on good behaviour also often existed too. For example, see O. Gelderblom, *Violence, opportunism, and the growth of long-distance trade in the Low Countries, 1250-1650* (forthcoming, 2012), chp. 7.

[129] On this process more generally, see Epstein, 'Cities, regions'; 'Town and country'. Also, M. Kowaleski, *Local markets and regional trade in medieval Exeter* (Cambridge, 1995), 223-4.

[130] A. Guenzi, *Pane e fornai a Bologna in età moderna* (Padua, 1982), 9-18; P. Stabel, *De kleine stad in Vlaanderen. Bevolkingsdynamiek en economische functies van de kleine en secundaire centra in het Gentse kwartier (14de-16de eeuw)* (Brussels, 1995), 226-7.

[131] P. Stabel, *Dwarfs among giants. The Flemish urban network in the late Middle Ages* (Louvain, 1997), 163-4; S. Ciriacono, 'L'economia regionale veneta in epoca moderna. Note a margine del caso bergamasco', in *Venezia e la Terraferma. Economia e società* (Bergamo, 1989), 45.

[132] D. Zanetti, *Problemi alimentari di una economia preindustriale. Cereali a Pavia dal 1398 al 1700* (Turin, 1964), 40-50; B. Farolfi, *Strutture agrarie e crisi cittadina nel primo Cinquecento bolognese* (Bologna, 1977), 35-6.

[133] G. Tocci, *Le terre traverse. Poteri e territory nei ducati di Parma e Piacenza tra Sei e Settecento* (Bologna, 1985), 280-9.

[134] On this issue, see F. Gómez Camacho, 'Later scholastics: Spanish economic thought in the XVIth and XVIIth centuries', in S. Todd Lowry & B. Gordon (eds.), *Ancient and medieval economic ideas and concepts of social justice* (Leiden, 1998), 530-5.

compulsory trading venues for the hinterlands.[135] For example, the *bastide* towns which emerged in parts of Southern France during the thirteenth and fourteenth centuries were founded by large landowners and lords interested in securing taxes on all trade performed at the market.[136] Also, manorial lords tried to reserve particular privileges for creating and accessing markets – such as the medieval burgesses and the signorial concessions to instigate trade through burgage tenure.[137] Manorial lords and monasteries also received fiscal privileges to hold markets on their own manors and curtes.[138] Certain groups received privileged rights over facilities for the storage of grain.[139]

Dynamic configurations basically equated to a wide choice of markets for producers. In Holland, inhabitants could choose from a number of rural and urban marketing opportunities for their produce and furthermore, this vast network of marketing opportunities often amounted to informal trading venues.[140] New markets could emerge, disappear, and re-emerge, and as a result, it could be an entirely unpredictable configuration. In Europe, many new settlements actually sprung up in the high and late Middle Ages as small market centres and trading posts.[141] Sometimes this necessitated a certain level of competition between markets. Often the access to a number of markets was heightened if the society was well-connected to urbanised environments, or had good transport links, and was close to rivers and ports.

In contrast, persistent configurations of markets for commodities were entirely restricted. Peripheral areas with low levels of urbanisation and long distances

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[135] R. Rutte, *Stedenpolitiek en stadsplanning in de Lage Landen (12de-13de eeuw)* (Zutphen, 2002), 125-7; K. Korteweg, 'Het stadsrecht van Geertruidenberg', *VMVOVR*, 10 (1946), 67-8.

[136] See C. Higounet, *Les villeneuves de Piémont et les bastides de Gascogne (XIIe –XIVe siècles)* (Paris, 1970), esp. 130-9; *Nouvelle approche sur les bastides du Sud-Ouest aquitain* (Paris, 1967), esp. 32-5; F. de Lannoy, *Les bastides du Languedoc* (Bayeux, 2003).

[137] R. Britnell, 'The proliferation of markets in England, 1200-1349', *Economic History Review*, 34 (1981), 209-21; J. Galloway, 'Town and country in England, 1300-1570', in S. Epstein (ed.), *Town and country in Europe, 1300-1800* (New York, 2001), 117-8; R. Goddard, 'Small boroughs and the manorial economy: enterprise zones or urban failures?', *Past & Present*, 210.1 (2011), 3-31.

[138] C. Violante, *La società Milanese nell'età precomunale* (Bari, 1953), 3-40.

[139] For example, S. Kaplan, *Provisioning Paris: merchants and millers in the grain trade in the eighteenth century* (Ithaca, 1984), 66-79.

[140] Dijkman, *Shaping medieval markets*, esp. chp. 3.

[141] Britnell, 'The proliferation of markets'; T. Lalik, 'Märkte des 12. Jahrhunderts in Polen', *Kwartalnik Historii Kultury Materialnej*, 10 (1962), 364; P. Toubert, 'Les statuts communaux et l'histoire des campagnes lombardes au XIVe siècle', *Mélanges d'Archéologie et d'Histoire*, 72 (1960), 499; A. Jones & J-L. Kupper, 'Villes, bourgs et franchises en Wallonie de 1250 à 1477', in H. Hasquin (ed.), *La Wallonie. Le pays et les homes*, i (Brussels, 1982), 145.

away from towns often had no or minimal options for engaging in trade – their choices of trade venues was entirely limited. Some places were entirely cut off from markets, and had to take precarious roads,[142] or were dissuaded from bringing goods to markets as a result of insecurity and banditry. In Russia, waterways remained open for only six weeks of the year in the north due to the extreme cold: if the cut-off was missed, goods ended up perishing.[143] Heavy tolls and taxes imposed on the transportation of produce also deterred producers from using distant markets or new ones emerging.[144] This was further exacerbated if there were few safe places to store perishable items such as grain.[145] Where commodity markets were restricted, difficult to find and enter, or unsafe, the barriers to trade pushed producers towards a more persistent subsistence economy.[146] A continual lack of good market integration was a characteristic feature of many areas of the pre-industrial world.[147]

D: Modes of exploitation

Egalitarian modes of exploitation characterised those pre-industrial societies which were arranged to allow a wide section of society profit from production. Producers could hold onto their surplus and the amount given away to social superiors or elites was minimal. Often these societies were untouched by the manorial system; essentially groups of free or independent farmers or peasants cultivating their own lands. Many societies in Western Europe did not face onerous extra-economic obligations such as the peasants described by Emmanuel Le Roy Ladurie in the mountain regions of Southern France, and in some places manorialism never truly

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[142] A. Leighton, *Transport and communication in early medieval Europe* (Newton Abbot, 1972), 58.

[143] D. Landes, *The wealth and poverty of nations* (London, 1999), 247.

[144] J. Weststrate, 'The organisation of trade and transport on the Lower Rhine and Waal rivers around 1550', in H. Brand (ed.), *Trade, diplomacy and cultural exchange: continuity and change in the North Sea area and the Baltic c. 1350-1750* (Hilversum, 2005), 95-113.

[145] Some of the problems outlined in D. McCloskey & J. Nash, 'Corn at interest: the extent and cost of grain storage in medieval England', *American Economic Review*, 74 (1984), 174-87; C. Small, 'Grain for the Countess: the hidden costs of cereal production in fourteenth-century Artois', *Proceedings of the Annual Meeting of the Western Society for French History*, 17 (1990), 60-1.

[146] P. Hoppenbrouwers & J.L. van Zanden, 'Restyling the transition from feudalism to capitalism. Some critical reflections on the Brenner Thesis', in *Peasants into farmers? The transformation of rural economy and society in the Low Countries (Middle Ages – 19th century) in light of the Brenner debate* (Turnhout, 2001), 22-6; Epstein, 'Cities, regions, 5-8.

[147] For example, for the case of India, see R. Studer, 'India and the Great Divergence', *Journal of Economic History*, 68 (2007), 393-437. However, methodological problems concerning the assessment of pre-industrial market integration are brought up recently in G. Federico, 'How much do we know about market integration in Europe?', *Economic History Review*, 65.2 (2012), 470-92.

established a foothold such as in Friesland or Drenthe in the Northern Netherlands.[148] Often this came down to colonisation context. Medieval colonists encouraged by territorial lords and princes in Europe often just had to pay standard rents and taxes.[149] On a more global scale, a distinction has been drawn between the decentralisation of power and large amounts of freedom for the colonising farmers of (parts of) British America, and the crown monopolisation of unoccupied land in Spanish America and the resulting extractive modes of exploitation that followed. Egalitarian modes of exploitation also included more equitable and unrestricted factor markets in labour and capital.[150] This configuration allowed for consistently low interest rates and credit accessible to a wide section of the population, both rural and urban.[151] Furthermore, labour movement and the actions of workers were more unrestricted.[152]

Polarised modes of exploitation benefited one or a restricted few interest groups, often to the detriment of the rest of society. More often than not this meant

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[148] See Le Roy Ladurie, *Les paysans de Languedoc*; *Montaillou: Cathars and Catholics in a French village, 1294-1324*, trans. B. Bray (Harmondsworth, 1980); van Bavel, *Manors and markets*, 86-8.

[149] van der Linden, *De cope*, 160-82; 'Het platteland', 69-78; Petri, 'Entstehung'; Lyon, 'Medieval real estate'.

[150] D. North, W. Summerhill & B. Weingast, 'Order, disorder and economic change: Latin America versus North America', in B. Bueno de Mesquita & H. Root (eds.), *Governing for prosperity* (London, 2000), 17-58.

[151] See J. Zuijderduijn, *Medieval capital markets: markets for rents between state formation and private investment in Holland (1300-1550)* (Boston, 2009), 242-6; 'Accessing a medieval capital market. The capacity of the market for renten in Edam and De Zeevang (1462-1563)', *Jaarboek voor Middeleeuwse Geschiedenis*, 11 (2009), 138-64; J. Zuijderduijn, J.L. van Zanden & T. de Moor, 'Small is beautiful. On the efficiency of credit markets in late medieval Holland', *European Review of Economic History*, 16.1 (2012), 3-22; 'Microcredit in late medieval Waterland. Households and the efficiency of capital markets in Edam and De Zeevang (1462-1563)', in S. Cavaciocchi (ed.), *La famiglia nell'economia europea. Secc. XIII-XVIII* (Florence, 2009), 651-68.

[152] B. van Bavel, 'The medieval origins of capitalism in the Netherlands', *BMGN –Low Countries Historical Review*, 125 (2010), 57. Weak guilds later perpetuated by the free trade interests of the mercantile elite. See C. Lis & H. Soly, 'Different paths of development: capitalism in the Northern and Southern Netherlands during the late Middle Ages and the early modern period', *Review*, 20 (1997), 230-6. Also see, B. de Munck, P. Lourens & J. Lucassen, 'The establishment and distribution of craft guilds in the Low Countries, 1000-1800', in M. Prak et al. (eds.), *Craft guilds in the early modern Low Countries: work, power, and representation* (Aldershot, 2006), 32-73; B. van Bavel, 'Rural wage labour in the sixteenth-century Low Countries: an assessment of the importance and nature of wage labour in the countryside of Holland, Guelders, and Flanders', *Continuity & Change*, 21 (2006), 65-66; S. Epstein, *Freedom and growth: the rise of states and markets in Europe, 1300-1750* (London, 2000), 115-42; C. Belfanti, 'Rural manufactures and rural proto-industries in the 'Italy of the cities' from the sixteenth through the eighteenth centuries', *Continuity & Change*, 8 (1993), 253-80.

that a high proportion of people were divorced from access to the modes of production, and furthermore, any surplus made was reduced by payment to social superiors or elites. The most extreme example of this polarisation in the modes of exploitation was seen in the European colonial context, where the labour of African slaves was combined with plantation economies based around a cash crop such as sugar or tobacco.[153] Other less extreme examples of polarised modes of exploitation were those societies based around extra-economic coercion such as the institution of serfdom and the perpetuation of customary obligations and works, which were used by elite lords and ecclesiastical institutions to secure work on their demesne farms. Other indirect modes of exploitation could also be considered a polarised configuration, such as the sharecropping contracts which continued well into the twentieth century in parts of Italy, Mexico, Brazil, and India. In these cases the producer received all of his credit, capital and equipment needed to run his enterprise from a wealthier landlord, but this relationship between tenant and landlords often descended into one of dependency and subordination.[154] Many scholars have pointed to the connection between poverty and sharecropping, although development economists give it a more positive image.[155] This sort of (quasi) indirect mode of exploitation occurred when there were real malfunctions in the labour and credit

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[153] See some of the classic works including, D. Galenson, *Traders, planters and slaves: market behavior in early English America* (Cambridge, 2002); L. Gregg, *Englishmen transplanted: the English colonization of Barbados, 1627-1660* (Oxford, 2003); R. Dunn, *Sugar and slaves: the rise of the planter class in the English West Indies, 1624-1713* (Chapel Hill, 2000 [red.]); M. Craton, *Empire, enslavement, and freedom in the Caribbean* (Oxford, 1997); R. Blackburn, *The making of New World slavery: from the Baroque to the modern, 1492-1800* (London, 1997).

[154] R. Emigh, 'Loans and livestock: comparing landlords' and tenants' declarations from the Catasto of 1427', *Journal of European Economic History*, 25.3 (1996), 705-23.

[155] Traditional dismissive views of sharecropping, see P. Hoffman, *Growth in a traditional society: the French countryside 1450-1815* (Princeton 1996); P. O'Brien, 'Path dependency, or why Britain became an industrialised and urbanized economy long before France', *Economic History Review*, 49.2 (1996), 213-49. Some have questioned whether sharecropping was more a symptom of poverty rather than a cause. For example, B. Yun, 'Economic cycles and structural changes', in T. Brady Jr., H. Oberman & J. Tracy (eds.), *Handbook of European history, 1400-1600* (Leiden, 1994), 134. More favourable views of sharecropping usually associated with development economists. See K. Finkler, 'From sharecroppers to entrepreneurs: peasant household production strategies under the Ejido system of Mexico', *Economic Development & Cultural Change*, 27 (1978), 103-20; F. Boadu, 'The efficiency of share contracts in Ghana's cocoa industry', *Journal of Development Studies*, 29 (1992), 108-20; C. Bell, 'Alternative theories of sharecropping: some tests using evidence from northeast India', *Journal of Development Studies*, 13 (1977), 317-46.

market (not enough access to either).[156] Indeed, polarised factor markets also included highly restricted legislation put on labour movements and actions, and inefficient credit markets with terribly high interest rates and poor access (particularly for rural producers).[157]

Dynamic modes of exploitation were those which displayed high tenurial flexibility, and production could quickly switch from direct management to indirect exploitation. Often this went hand-in-hand with the perpetuation of short-term leasing, which proliferated across some parts of Western Europe from the late Middle Ages onwards. The emergence of these leases was dependent on a number of conditions: good levels of rural credit, a lack of labour or at least cheap labour, a waning of jurisdictional or extra-economic powers, and perhaps poor or irregular prices being paid for agricultural products.[158] The move towards indirect exploitation of land and the proliferation of a lease market was dynamic in a sense that land could change hands very often, usually more so than in a normal land market.[159]

Persistent modes of exploitation were inflexible and not easily adaptable. Often it reinforced the same social and economic hierarchies over many centuries. In some areas, for example, direct demesne management and even customary labour dues and obligations lingered on until the early modern period. In these places there was not even any incentive to change. In parts of the Mediterranean, labour-intensive and capital-extensive grain estates worked through a system of *latifundia* lasted for many centuries because the large landowners had no interest in modifying the system, were more concerned with urban life, and were afraid of investing finance into agricultural systems where the soils were poor and droughts were frequent.[160]

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[156] D. Curtis, 'Florence and its hinterlands in the late Middle Ages: contrasting fortunes in the Tuscan countryside, 1300-1500', *Journal of Medieval History* (forthcoming, December, 2012).

[157] van Bavel, 'Markets for land'.

[158] van Bavel, 'Rural wage labour'; J. Lucassen, *Naar de kusten van de Noordzee: trekarbeid in Europees perspektief, 1600-1900* (Gouda, 1984), 160-71.

[159] B. van Bavel, 'The emergence and growth of short-term leasing in the Netherlands and other parts of Northwestern Europe (eleventh-seventeenth centuries). A chronology and a tentative investigation into its causes', in B. van Bavel & P. Schofield (eds.), *The development of leasehold in northwestern Europe c. 1200-1600* (Turnhout, 2008), 179-213; 'Land, lease and agriculture: the transition of the rural economy in the Dutch river area from the fourteenth to the sixteenth century', *Past & Present*, 172 (2001), 3-43.

[160] For example, see D. Mack Smith, *The latifundia in modern Sicilian history* (Oxford, 1965); M. Aymard, 'Mesures et interpretations de la croissance. Rendements et productivité agricole dans l'Italie moderne', *Annales. Economie, Sociétés, Civilisations*, 28 (1973), 475-98. Although we have been rightly warned not to project continuity too far back in time in the excellent S. Epstein, *An island for itself: economic development and social change in late medieval Sicily* (Cambridge, 1992), 163.

Often landlord incentives for innovation in agriculture were diminished by their ability to just extend demesne farms or exploit forced labour.[161] Some indirect modes of exploitation also lent itself to long-term continuity such as the hereditary leasing of farms. The logic behind these leases were stable rents for the landlord (combined with high entry fees), and secure use-rights for the tenant.[162] In fact in some places the line between owner and user was entirely blurred, such was the strength of tenancy for the farmer. The farmer generally had to maintain the unity of the farm, and was not allowed to divide it up between heirs or alienate it.[163] As farms began to be built in stone, landlords and tenants were locked into the contract for the long-term. If the tenant withdrew he paid over the odds for the demolition, but if the landlord withdrew he had to pay for all the expensive buildings.[164]

2.2 Quantifying the configurations

So far it has been argued that pre-industrial societies were composed of four key configurations, which were arranged in different ways according to whether they were assessed as either 'egalitarian' or 'polarised', and 'dynamic' or 'persistent'. To aid the comparative process, each assessed configuration could be given a quantifiable figure as far as conceivably possible; a method adapted from sociologist Charles Ragin, who devised a way of bridging the gap between qualitative and quantitative academic approaches.[165]

Each of the four configurations can be given a score, or more precisely two scores. For example, if a configuration was assessed as 'egalitarian', it received a score of (1), while if it was 'polarised', it received a score of (0). Additionally, if the same configuration was assessed as 'dynamic', it received a second score of (1), while it was 'persistent', it received a second score of (0). Historical research is never that simple,

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[161] M. Dribe, M. Olsson & P. Svensson, 'If the landlord so wanted… Family, farm production, and land transfers in the manorial system', *Economic History Review*, 65.2 (2012), 747.

[162] S. Brakensiek, 'North-west Germany, 1000-1750', in van Bavel & Hoyle (eds.), *Rural economy*, 233.

[163] See W. Achilles, 'Ländliche Wirtschafts- und Sozialgeschichte von der Mitte des 17. bis zum Beginn des 19. Jahrhunderts', in C. van den Heuvel & M. von Boetticher (eds.), *Geschichte Niedersachsens*, iii (Hannover, 1998), 691-727; D. Saalfeld, 'Landliche Wirtschafts- und Sozialgeschichte von der Mitte des 16. bis zum Beginn des 17. jahrhunderts', in van den Heuvel & von Boetticher (eds.), *Geschichte*, 637-88; W. Formsma, *Beklemrecht en landbouw. Een agronomisch-historische studie over het beklemrecht in Groningen, in vergelijking met ontwikkelingen elders* (Groningen, 1980).

[164] P. Priester, *De economische ontwikkeling van de landbouw in Groningen 1800-1910. Een kwalitatieve en kwantitatieve analyse* (Wageningen, 1991), 113-9.

[165] C. Ragin, *The comparative method: moving beyond qualitative and quantitative strategies* (London, 1987).

however. There are undoubtedly going to be many cases where either (a) it is impossible to say whether, for example property distribution, was egalitarian or polarised, or (b) there is no data available to make a judgement. In those cases, the configuration in question was given a score of (0.5). Thus, in sum, each of the four configurations which made up a society received two scores: either a (1), (0), or (0.5), depending on how 'egalitarian' or 'polarised' it was, and either a (1), (0), or (0.5), depending on how 'dynamic' or 'persistent' it was.

2.3 Identifying the 'types of pre-industrial societies'

The way the distinctive 'types of societies' are identified from each other is by simply calculating two average scores (one for the 'egalitarian' / 'polarised' opposition, and one for the 'dynamic' / 'persistent' opposition) of all the configurations taken together. This can be better shown in a full table for the entirely made-up pre-industrial society of 'Tyrannoland' in the period 1200-1550. Each of the scores for each of the configurations is added up and simply divided by four.

Table 2.1 The breakdown of Tyrannoland (1200-1550) into quantifiable configurations

	Egalitarian-Polarised	**Dynamic-Persistent**
Property	0	0
Power	0	0
Commodity markets	0	0
Modes of exploitation	0.5	1
Total scores	**0.13**	**0.25**

Tyrannoland was judged to have been (0.13) on the egalitarian or polarised scale, and (0.25) on the dynamic or persistent scale. What do these scores mean? It is suggested here that there were four basic types of pre-industrial society. If a society received a total score of (0) to (0.5) in the first column, it could be considered 'polarised'. If in the same column however, it received a total score of (0.51) to (1), it could be considered 'egalitarian'. Likewise, if a society received a total score of (0) to (0.5) in the second column, it could be considered 'persistent', while a total score of (0.51) to (1) rendered it 'dynamic'. Thus, for example, the pre-industrial society of Tyrannoland between 1200 and 1550 could be considered 'polarised-persistent'. The four basic types of society based on this idea are shown in the table below.

Table 2.2 The four basic types of pre-industrial society

Egalitarian/polarised score	Dynamic/continuous score	Type of society
0.51-1	0-0.5	Egalitarian-persistent
0-0.5	0.51-1	Polarised-dynamic
0.51-1	0.51-1	Egalitarian-dynamic
0-0.5	0-0.5	Polarised-persistent

2.4 The causal link between 'types of society' and 'settlement development': strategies for managing and exploiting resources

A: Managing resources in egalitarian-persistent societies: protectionist strategies

Pre-industrial societies classified as egalitarian-persistent were interested in maintaining the status quo. To do this, they used a number of **protectionist strategies** to share or avoid risks, lessen the potentially disturbing and unpredictable effects of the market, and create a favourable balance between population and resources. Rather than adapting to demographic, environmental, and economic changes, these societies built strategies to shield themselves from potentially destabilising effects of commercial and population pressure on resources, and furthermore, made sure these destabilising risks were well divided amongst inhabitants.[166] **As a result, these societies produced settlements that did not change very much, but at the same time were very resilient and effective at seeing off periods of crisis.**

How did egalitarian-persistent societies go about implementing these protectionist strategies, and what did they consist of? One of the ways which spread across Western Europe from the early Middle Ages and into parts of Eastern Europe by the late Middle Ages was the implementation of an open field system.[167] The open field system helped settlements withstand any kind of Malthusian-based crisis caused by population pressure on finite levels of resources. Indeed, the proliferation of this field system through many parts of Western Europe in the Middle Ages is a good example, since it may have gone hand in hand with exceptional population growth

[166] The division of risk noted in G. Bankoff, 'Dangers to going it alone: social capital and the origins of community resilience in the Philippines', *Continuity & Change*, 22 (2007), 327-55.

[167] For example into the sixteenth-century Baltic, see J. Renes, 'Grainlands. The landscape of open fields in a European perspective', *Landscape History*, 31.2 (2010), 37-70.

between the tenth and thirteenth centuries (although it did emerge in some areas earlier than the ninth century).[168] In theory, as population levels increased, the need for rural inhabitants to divide their resources up in a more equitable manner became more acute. The common fields allowed for a more egalitarian division of land as every households' landholding was divided up into small morsels and scattered across the fields,[169] while the community lived often lived in a concentrated village at the heart of these fields.[170] The same risk-limitation concerns still inform the persistence of fragmented land distributions in parts of Asia and Africa today.[171] Not only did scattering make transport and labour costs more equal, but it was also an exercise in risk-management as no single person could monopolise the best soils; if one field harvest failed, this was not disastrous.[172] Furthermore, it allowed for

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[168] On the skepticism on the link between open-field proliferation and demographic pressure, see C. Lewis, P. Mitchell-Fox & C. Dyer, *Village, hamlet and field. Changing medieval settlements in central England* (London, 1997), 213-6.

[169] For a basic description see R. Hoffmann, 'Medieval origins of the common fields', in W. Parker & E. Jones (eds.), *European peasants and their markets* (Princeton, 1975), 23-71. There are many examples in the literature of holdings divided with strict equality, for example, see R. Hilton, *The economic development of some Leicestershire estates in the fourteenth and fifteenth centuries* (Oxford, 1947), 153-5; D. Roden, 'Field systems of the Chiltern Hills and their environs', in A. Baker & R. Butlin (eds.), *Studies of field systems in the British Isles* (Cambridge, 1973), 349; P. Brown, 'Arable land as commons: land reallocation in early modern Japan', *Social Science History*, 30.3 (2006), 445-8.

[170] Although the link between the laying-down of open fields and settlement concentration is still debated. For a historiography, see S. Oosthuizen, 'Medieval field systems and settlement nucleation: common or separate origins?', in N. Higham (ed.), *The landscapes of Anglo-Saxon England* (Woodbridge, 2010), 108-31.

[171] A. Heston & D. Kumar, 'The persistence of land fragmentation and in peasant agriculture: an analysis of south Asian cases', *Explorations in Economic History*, 20 (1983), 199-220; S. Tan, N. Heerink & F. Qu, 'Land fragmentation and its driving forces in China', *Land Use Policy*, 23 (2006), 272-85; S. Simmons, 'Land fragmentation in developing countries: the optimal choice and policy implications', *Explorations in Economic History*, 25 (1988), 254-62; N. Sengupta, 'Fragmented landholding, productivity, and resilience management', *Environment & Development Economics*, 11.4 (2006), 507-32; T. Nguyen, E. Cheng & C. Findlay, 'Land fragmentation and farm productivity in China in the 1990's', *China Economic Review,* 7 (1996), 169-80; B. Najafi & M. Bakhshoodeh, 'The effects of land fragmentation on the efficiency of Iranian farmers: a case study', *Journal of Agricultural Science & Technology*, 1 (1992), 15-22; A. Jabarin & F. Epplin, 'Impact of land fragmentation on the cost of production of wheat in the rain-fed region of northern Jordan', *Agricultural Economics*, 11 (1994), 191-6; B. Blarel, P. Hazell, F. Place & J. Quiggin, 'The economics of farm fragmentation: evidence from Ghana and Rwanda', *World Bank Economic Review*, 6 (1992), 233-54; K. Anantha Ram, A. Tsunekawa, D. Saha & T. Miyazaki, 'Subdivision and fragmentation of land holdings and their implication in desertification in the Thar Desert, India', *Journal of Arid Environments*, 41.4 (1999), 463-77.

[172] C. Dahlman, *The open field system and beyond* (Cambridge, 1980), 111-4; H. Fox, 'Some ecological dimensions of medieval field systems', in K. Biddick (ed.), *Archaeological approaches to medieval*

collective regulation of the harvest, prevented grain theft, and ensured orderly grazing on the stubbles.[173] Local people had the opportunity to band together into small groups to manage plough-teams and oxen were sometimes collectively acquired (often expensive for any one person anyway).[174] The open fields were often an exercise in sustainable ecological management as they allowed for one of the fields (usually one out of three but could be more) to spend time fallow, thus not exhausting the nutrients of the soil (thus often described by scholars as 'the common field' system).[175] Each participant had a number of obligations to meet, for example, only grazing animals on the fields at certain times of the year, and good practice was often enforced by the common members themselves.[176] Nonetheless, there were occasions when members of the community failed to fulfil the obligations, did not adhere to the rules, or caused disturbances for others.[177] Therefore, in some places good practice was enforced by more formal councils.[178] In sum, common fields were one way in which the inhabitants of settlements within egalitarian-persistent societies managed their resources carefully and with one eye on risk-avoidance and risk-management, thereby increasing the resilience of the habitation against crises and misfortune.

Europe (Kalamazoo, 1984), 119-58; D. McCloskey, 'English open fields as behaviour toward risk', *Research in Economic History*, 1 (1976), 124-70; 'The prudent peasant: new findings on open fields', *Journal of Economic History*, 51 (1991), 343-55; M. Bailey, 'Beyond the Midland field system: the determinants of common rights over the arable in medieval England', *Agricultural History Review*, 58.2 (2010), 160.

[173] L. Vardi, 'Contruing the harvest: gleaners, farmers, and officials in early modern France', *American Historical Review*, 98.5 (1993), 1424-7; W. Ault, *Open-field farming in medieval England. A study of village by-laws* (London, 1972), 27-40.

[174] W. Rösener, *Bauern im Mittelalter* (Munich, 1985), 151.

[175] J. Pretty, 'Sustainable agriculture in the Middle Ages on the English manor', *Agricultural History Review*, 38.1 (1990), 1-19; B. Campbell, 'Ecology versus economics in late thirteenth and early fourteenth century English agriculture', in D. Sweeney (ed.), *Agriculture in the Middle Ages: technology, practice, and representation* (Philadelphia, 1995), 76-108.

[176] T. de Moor, 'Avoiding tragedies: a Flemish common and its commoners under the pressure of social and economic change during the eighteenth century', *Economic History Review*, 62.1 (2009), 1-22. A notion argued for all types of communal institution. See G. Richardson, 'Craft guilds and Christianity in late medieval England. A rational-choice analysis', *Rationality & Society*, 17 (2005), 160-1.

[177] Tawney, *The agrarian problem*, 161-2.

[178] For example, the *Dorfgenossenschaft* in Germany in W. Rösener, *Peasants in the Middle Ages* (Chicago, 1992), 46. Also, the *bystämman* in Sweden in V. Moberg, *A history of the Swedish people*, i (New York, 1973), 40.

Another protectionist strategy was to impose a system of regulated common rights.[179] Many scholars have shown how the formalisation of common rights from the high Middle Ages onwards were used to prevent over-exploitation of the local resources, thereby sustaining rural communities. In the 1960s, a highly influential paper entitled 'The tragedy of the commons' suggested common pooling of resources were inevitably bound to fail, for when population increased to a certain level, members of the system would begin 'free-riding', thus bringing down the community with them.[180] The problem with this view was it was not grounded in historical research and merely operated at the theoretical level, thus this paper has now been resoundingly dismissed by historians and social scientists, in particular Elinor Ostrom.[181] The institutional management of resources through the commons had high significance for many regions of Europe in the pre-industrial period, where communal property forms sometimes lingered on until the nineteenth century.[182] All across the pre-industrial world, there is evidence of communities actively defending and preserving their perceived rights to marshes and woodlands, in the face of would-be colonists.[183] This went for local rights to use waters as well.[184] In parts of Asia and

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[179] The risk-avoidance qualities of the commons asserted in the framework of T. de Moor, 'The Silent Revolution: a new perspective on the emergence of commons, guilds, and other forms of corporate collective action in Western Europe', *International Review of Social History*, 53 (2008), 179-212.

[180] G. Hardin, 'The tragedy of the commons', *Science*, 162 (1968), 1243-8.

[181] E. Ostrom, *Governing the commons: the evolution of institutions for collective actions* (Cambridge, 1990); 'Coping with the tragedies of the commons', *Annual Review of Political Science*, 2 (1999), 493-535; E. Ostrom, J. Walker & R. Gardner, 'Covenants with and without a sword: self-governance is possible', *American Political Science Review*, 86 (1992), 404-17; C. Dahlman, 'The tragedy of the commons that wasn't: on technical solutions to the institutions game', *Population & Environment: A Journal of Interdisciplinary Studies*, 12.3 (1991), 285-96; P. Dasgupta, *Human well-being and the natural environment* (Oxford, 2001); D. Feeny, S. Hana & A. McEvoy, 'Questioning the assumptions of the 'tragedy of the commons' model of fisheries', *Land Economics*, 72 (1996), 187-205; J. Richards (ed.), *Land, property, and the environment* (Oakland CA., 2002).

[182] For a chronology, see T. de Moor, L. Shaw-Taylor & P. Warde (eds.), *The management of common land in north west Europe, c. 1500-1850* (Turnhout, 2002).

[183] C. Dyer, 'Conflict in the landscape: the enclosure movement in England, 1220-1349', *Landscape History*, 28 (2006), 21-33; J. Birrell, 'Common rights in the medieval forest: disputes and conflicts in the thirteenth century', *Past & Present*, 117 (1987), 22-49. C. Manaresi (ed.), *I placiti del 'Regnum Italiae'*, i (Rome, 1955), no. 36; A. Andreolli & M. Montanari, *L'azienda curtense in Italia. Properietà della terra e lavoro contadino nei secoli VIII-XI* (Bologna, 1983), 194-6; F. Menant, 'Les chartes de franchises de l'Italie communale', in M. Bourin & P. Martin (eds.), *Pour anthropologie du prélèvement seigneurial dans les campagnes médiévales (XIe-XIVe). Réalités et représentations paysannes* (Paris, 2004), 239-40.

[184] See H. Heimpel, 'Die Federschnur: Wasserrecht und Fischrecht in der Reformation Kaiser Sigismunds', *Deutsches Archiv für Erforschung des Mittelalters*, 19 (1963), 474-88; P. Blickle, 'Wem

Africa, commons still play an integral role in the sustenance of many rural societies today, while many contemporary fisheries are collectively self-governed.[185] The commons helped balance population and resources (and in the face of commercial pressures) by putting restrictions on grazing, limiting the cutting-down of trees for private gain,[186] and the management of water supplies and sources. Formal institutions such as courts developed in order to examine infringements made on the commons.[187] Corporate control of the commons sometimes involved real close supervision.[188] As a result of this protectionist strategy, egalitarian-persistent societies were shielded from commercial and population pressures on resources, which if unchecked could have brought ruin to the settlements.

Another protectionist strategy was de-specialisation, whereby households would engage in a range of economic activities in order to stave off crisis. Rather than 'putting all the eggs in one basket', rural producers knew that if the grain harvest failed, they could rely on chestnut production, fishing rights, or the timber from the forest. In some cases, risk-adverse societies created mixes of grains for cultivation, which created lower yields but a greater chance that all of the sown seeds would not

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gehörte der Wald? Konflikte zwischen Bauern und Obrigkeiten um Nutzungs- und Eigentumsansprüche', *Zeitschrift für Württembergischen Landesgeschichte*, 45 (1986), 167-78; E. Occhipinti, 'Fortuna e crisi di un patrimonio monastico: Morimondo e le sue grangie fra XII e XIV secolo', *Studi Storici*, 26 (1985), 320-1; G. Devailly, *Le Berry du Xe siècle au milieu du XIIIe: etude politique, religieuse, sociale et économique* (Paris, 1973), 361.

[185] For contemporary commons, see A. Agrawal & A. Chhatre, 'Explaining success on the commons: community forest governance in the Indian Himalaya', *World Development*, 34.1 (2006), 149-66; A. Agrawal & E. Ostrom, 'Collective action, property rights and decentralization in resource use in India and Nepal', *Politics & Society*, 29.4 (2001), 485-514; J. Ribot, 'Theorizing access: forest profits along Senegal's charcoal commodity chain', *Development & Change*, 29.2 (1998), 307-41. For fisheries, see J. Acheson, 'The politics of managing the Maine lobster industry: 1860 to the present', *Human Ecology*, 25.1 (1997), 3-27; B. McCay & S. Jentoft, 'From the bottom up. Participatory issues in fisheries management: issues in institutional design', *Society & Natural Resources*, 9.3 (1996), 237-50; J. Kurien, 'Ruining the commons and the response of the commoners: coastal overfishing and fishworkers' actions in Kerala state, India', in D. Ghai & J. Vivian (eds.), *Grassroots environmental action: people's participation in sustainable development* (London, 1992), 221-58.

[186] For example, see M. Sommé, 'Réglements, délits et organisation des ventes dans la forêt de Nieppe (début XIVe siècle – début XVIe siècle)', *Revue du Nord*, 72 (1990), 511-31.

[187] L. Schütte, 'Markenrecht und Markengerichtsbarkeit in Nordwestdeutschland', in U. Meiners & W. Rösener (eds.), *Allmenden und Marken vom Mittelalter bis zur Neuzeit* (Cloppenburg, 2004), 31-45; J. Hayhoe, 'Litigation and the policing of communal farming in northern Burgundy, 1750-1790', *Agricultural History Review*, 50.1 (2002), 52.

[188] Particularly in Japan; for example, see M. McKean, 'The Japanese experience with scarcity: management of traditional common lands', in K. Bailes (ed.), *Environmental history: critical issues in comparative perspective* (Lanham, 1985), 334-59.

fail.[189] In egalitarian-persistent societies, the extraction of large amounts of surplus to support a steady flow of rents and taxes was not needed. Woodlands and wastes provided fuel, pasture, and building materials for communities, often distributed and accessed through collective institutions or the commons.[190] Chestnuts were a popular subsistence food, particularly in the Appennines of Italy.[191] Animals were hunted in the forest (although hunting in the forest did become in some cases become the reserve of the elite).[192] Furthermore, the marshes were good environments for hunting and fishing.[193] In fact, wetland environments and streams provided a diverse range of fish for communities and religious institutions.[194] Fresh wild fish in the late Middle Ages drew a good price, and in some fifteenth-century European towns cost five times the amount as beef.[195] Societies which based their economies around these kinds of concerns had little interest in things like land reclamation, and in fact, it has been revealed in an important article in the *American Historical Review* that the more intensive use of the land supported by dikes and mills ended up disturbing the good functioning of the ecosystems that these societies depended upon.[196] As a result of the protective and risk-avoidance strategies used, settlements were not entirely wiped out from disastrous events such as failed harvests or cattle pestilences, and limited the problems of the environmental degradation.

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[189] Pretty, 'Sustainable agriculture'.

[190] T. Spek, *Het Drentse esdorpenlandschap: een historisch geografische studie* (2 vols, Utrecht, 2004); J.L. van Zanden, 'The paradox of the Marks. The exploitation of the commons in the eastern Netherlands, 1250-1850', *Agricultural History Review*, 47.2 (1999), 131; J. Bieleman, *Boeren op het Drentse zand, 1600-1910: een nieuwe visie op de 'oude' landbouw* (Wageningen, 1987).

[191] B. Andreolli, 'Formule di pertinenza e paesaggio. Il castagneto nella Lucchesia altomedievale', *Rivista di Archeologia, Storia, Economia, Costume*, 3 (1977), 7-18; G. Cherubini, 'La 'civiltà' del castagno in Italia alla fine del medioevo', *Archeologia Medievale*, 8 (1981), 247-80; D. Coltelli, 'La civiltà del castagno in Lunigiana', *Cronaca e Storia di Val di Magra*, 6 (1977), 157-79.

[192] Especially for furs. See R. Delort, *Le commerce des fourrures en Occident à la fin du moyen age (vers 1300-vers 1450)*, i (Rome, 1978), 108-17.

[193] M. Montanari, *L'alimentazione contadina nell'Alto Medioevo* (Naples, 1979), 34-5, 48-9, 268-70.

[194] R. Hoffman, 'Economic development and aquatic ecosystems in medieval Europe', *American Historical Review*, 101 (1996), 636; 'Fishing for sport in medieval Europe: new evidence', *Speculum*, 60 (1985), 886-7; R. Trexler, 'Measures against water pollution in fifteenth-century Florence', *Viator*, 5 (1974), 462-7.

[195] H. Hitzbleck, *Die Bedeutung des Fisches für die Ernährungswirtschaft Mitteleuropas in vorindustrieller Zeit unter besonderer Berücksichtigung Niedersachsens* (Göttingen, 1971), 104-8.

[196] Hoffman, 'Economic development'.

B: Managing resources in polarised-dynamic societies: short-termist strategies

Pre-industrial societies classified as polarised-dynamic were dominated by powerful interest groups, who were interested in using the plethora of techniques available to increase their particular grip on power or wealth. To do this, they used a number of **short-termist strategies** to exploit what they could out of the available resources, but at the same time making the rest of society highly exposed to potential disasters such as famine and flooding. As a result, these societies produced settlements that could rise up and change very rapidly as a result of short-term economic gains (for limited groups), but at the same time could quickly collapse as a result of precarious exposure to unpredictable and unfavourable events.

One of the short-termist strategies that polarised-dynamic societies used was large-scale land reclamation. Land reclamation or colonisation was the process by which people brought 'unused' or 'waste' land into productive use. In the pre-industrial era, this meant the assarting of woodlands, the clearing of bushes, the development of irrigation systems, or the drainage of wetlands, in order to create new land (i.e. more resources for interest groups to exploit). Although the large-scale reclamation of new lands such as the conversion of marshlands to fertile polders allowed for the rapid emergence of new settlements (so-called polder villages), and created more jobs for agricultural workers,[197] it also made settlements more susceptible to crisis. It is well-known that land reclamation often produced some serious negative environmental effects, often leading to the degradation of ecosystems. The reclamation of lowland marshes in parts of China along the Yangtze River by already-large landowners during the Ming and Qing periods was propped up by the State, which was looking to indirectly benefit from agricultural intensification with commercialisation and urbanisation in the core areas of the Yangtze. The tax concessions and favourable conditions for these acquisitive landlords led to increasingly polarised frontier societies, which in turn created environmental problems. For example, the State often failed to make absentee landowners responsible for their dike repairs – to the detriment of the local ecosystems and settlements.[198] This polarisation also led to outward migration of a large population

[197] van Bavel, 'Markets for land', 527.

[198] M. Elvin, 'On water control and management during the Ming and Ch'ing periods: a review article', *Ch'ing-shih Wen-t'I*, 3.3 (1975), 96; P. Perdue, 'Official goals and local interests: water control in the Dongting Lake region during the Ming and Qing periods', *Journal of Asian Studies*, 41.4 (1982), 762.

from new polder areas, thus making it difficult to gain the tax base necessary to maintain the water management structures.[199]

Similar problems existed in the British Punjab, where the British government aimed to consolidate power there, by offering land grants to elite caste members (encouraging land reclamation), thus keeping certain powerful interest groups onside.[200] However, this unregulated reclamation process, while further entrenching social and economic polarisation in the rural Punjab by enriching an already elite group of landowners, created negative knock-on effects in nearby areas dominated by poorer peasants – including heightened water pressures and flooding.[201] This kind of reclamation also stimulated settlement into areas never inhabited before (for the very reason they were prone to flooding) bringing more poor people into vulnerable situations.[202] Social manipulation through colonisation often ended in violent protest from marginalised groups.[203]

Frequently the reclamation of marshlands by powerful interest groups such as absentee urban investors caused environmental problems, if not in the colonised area itself, then it produced knock-on effects for other societies. It has been shown in southern France that the planned drainage of the marshes around Arles by investors from Amsterdam would have had disastrous effects on the nearby town of Tarascon. The loss of the Arles marshes in the seventeenth century would have meant the disappearance of an important safety valve, easing water pressure in Tarascon.

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[199] Perdue, 'Official goals and local interests', 754. Also noted in the collapse of the Egyptian water management systems after the Black Death in S. Borsch, 'Environment and population: the collapse of large irrigation systems reconsidered', *Comparative Studies in Society & History*, 46 (2004), 451-68.

[200] I. Ali, 'The Punjab canal colonies, 1885-1940' (unpublished PhD thesis, Australian National University, 1980), 133-45, 171-4. On the polarisation caused by the dubious relationship between British State and rural eites, see H. Alavi, 'The politics of dependence: a village in West Punjab', *South Asian Review*, 4 (1970-1), 111-25; S. Ahmad, *Class and power in a Punjabi village* (New York, 1977).

[201] I. Ali, 'Malign growth? Agricultural colonization and the roots of backwardness in the Punjab', *Past & Present*, 114 (1987), 124.

[202] B. Weil, 'The rivers come: colonial flood control and knowledge systems in the Indus Basin, 1840s-1930s', *Environment & History*, 12 (2006), 14. On the general failures and flaws in colonial policy towards irrigation, famine, and habitation in British India, see R. Ahuja, 'State formation and 'famine policy' in early colonial South India', *Indian Economic & Social History Review*, 39 (2002), 351-80.

[203] R. Grove, *Ecology, climate, and empire: colonialism and global environmental history, 1400-1940* (Cambridge, 1997), 208-11; T. Sunseri, 'Reinterpreting a colonial rebellion: forestry and social control in German East Africa, 1874-1915', *Environmental History*, 8 (2003), 430-51; P. Howard, 'The history of ecological marginalization in Chiapas', *Environmental History*, 3 (1998), 357-77; C. Bundy, "We don't want your rain, we won't dip': popular opposition, collaboration and social control in the anti-dipping movement, 1908-16', in W. Beinart & C. Bundy (eds.), *Hidden struggles in rural South Africa: politics and popular movements in the Transkei and Eastern Cape, 1890-1930* (London, 1987), 191-221.

Understandably the citizens of Tarascon mobilised themselves through riots and violence.[204] In an area of the northern Netherlands, urban investment in companies charged with the reclamation of the peat lands (a common process from the sixteenth century onwards)[205] ended up causing flooding of other farmers' lands elsewhere – again causing angry uproar.[206] In the Dongting Lake area of the central Yangtze region, large landowners refused to do away with dikes (which were creating high water pressures), simply because they did not want to lose their investments in new lands (made more valuable in the context of the Qing demographic and commercial boom).[207] The severe floods of the nineteenth and twentieth centuries in this region have been blamed on the deteriorating water management systems linked to the reclamation process.[208]

Furthermore, newly colonised polarised-dynamic societies often embarked on economic exploitation that was not wholly suited to the water management systems put in place. In colonial Guanajuato, the reclamation of new cultivated land and the move away from a previously well-balanced extensive grazing economy proved to be a dangerous move that threatened the economic well-being of the region. Agriculturalists began to plant grains in order to sell at high prices to European silver

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[204] Morera, 'Environmental change', 92-3.

[205] See M. Gerding, *Vier eeuwen turfwinning. De vervening in Groningen, Friesland, Drenthe en Overijssel tussen 1500 en 1950* (Wageningen, 1995); S. van der Molen, *Turf uit de Wouden; bijdrage tot de geschiedenis van de hoogveengraverij in oostelijk Friesland tot 1900* (Leeuwarden, 1978); J. de Zeeuw, 'Peat and the Dutch Golden Age. The historical meaning of energy-attainability', *AAG Bijdragen*, 21 (1978), 3-32.

[206] M. 't Hart, 'Rulers and repertoires: the revolt of a farmers' republic in the early modern Netherlands', in M. Hanagan, L. Page Morch & W. te Brake (eds.), *Challenging authority: the historical study of contentious politics* (Minneapolis, 1998), 202.

[207] Perdue, 'Official goals and local interests', 748. See also P. Perdue, 'Population growth, agricultural production, and social conflict in Hunan in the Ming and Qing periods' (unpublished PhD thesis, Harvard University, 1981), chp. 6; T. Liu, 'Dike construction in Ching-chou', Papers *on China*, 23 (1970), 1-28; P-t. Ho, *Studies on the population of China, 1368-1953)* (Cambridge MA, 1959), 227-30.

[208] See, for example, the disastrous flooding near Jingzhou in 1788 described in A. Morita, 清代水利史研究, 森田明[著 (A study of water management in the Qing dynasty) (Tokyo, 1974), 50-80. On the general environmental problems caused by reclamation in China, see M. Elvin, 'Three thousand years of unsustainable growth: China's environment from archaic times to the present', *East Asian History*, 6 (1993), 7-46; 'The environmental legacy of Imperial China', *The China Quarterly*, 156 (1998), 733-56; R. Edmonds, *Patterns of China's lost harmony. A survey of the country's environmental degradation and protection* (London, 1994), chp. 2. Problems more related to water pressure discussed in M. Elvin & S. Ninghu, 'Engineering the sea: hydraulic systems and pre-modern technological lock-in in the Hangzhen Bay area, circa 1000-1800', in I. Suntato & Y. Yoshinori (eds.), *Nature and humankind in the age of environmental crisis* (Kyoto, 1995), 86.

miners; however, wheat required consistent irrigation, which made poor farmers far more susceptible to harvest failure through the unpredictable climatic events (i.e. flooding and drought).[209] Elsewhere the conversion of swamps to rice fields in colonial Georgia simplified the hydrography of the coastal plains, making them more prone to unpredictable flooding.[210]

The short-termist strategies of polarised-dynamic societies also meant they were characterised by a number of configurations that meant dominant interest groups either did not care about the potential degradation of the woodlands and soils, or simply had no need or requirement to take responsibility for their actions. It is no coincidence that the most extreme frontier societies produced by European colonisation of the Americas led to some destabilising ecological processes in turn leading to some of the most severe environmental problems in the world.[211] While the initial environmental effects of the English, Dutch and French settlement may have been modest,[212] the cultivation of sugar cane changed all that, and within a few decades in the seventeenth century, whole islands were losing their tree cover – certainly in Barbados and the Leeward Islands.[213] French colonists on St. Croix performed slash and burn activities over the entire area of the island.[214] Cuba went the same way (although later in the nineteenth century) – large tracts of forest swept

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[209] G. Endfield & S. O'Hara, 'Degradation, drought, and dissent: an environmental history of colonial Michoacán, West Central Mexico', *Annals of the Association of American Geographers*, 89.3 (1999), 227-8.

[210] M. Stewart, *What nature suffers to groe: life, labor, and landscape on the Georgia coast, 1680-1920* (Athens, 1996).

[211] B. Richardson, *The Caribbean in the wider world, 1492-1992. A regional geography* (Cambridge, 1992), 31. See also, R. Grove, *Green Imperialism: colonial expansion, tropical island edens, and the origins of environmentalism, 1600-1860* (Cambridge, 1995); D. Arnold, *The problem of nature: environment, culture and European expansion* (Oxford, 1996); W. Beinart & L. Hughes, *Environment and empire* (Oxford, 2007). A thesis only challenged so far by S. Max Edelson, 'Clearing swamps, harvesting forests: trees and the making of a plantation landscape in the colonial South Carolina lowcountry', *Agricultural History*, 81.3 (2007), 381-406; B. Donahue, *The great meadow: farmers and the land in colonial Concord* (New Haven, 2004), xv; T. Breen, *Tobacco culture: the mentality of the great tidewater planters on the eve of revolution* (Princeton, 1985). They have instead argued for the adaptability of plantation agriculture to environmental change.

[212] For example, see F. Innes, 'The pre-sugar era of European settlement in Barbados', *Journal of Caribbean History*, 1 (1970), 1-22.

[213] D. Watts, *The West Indies: patterns of development, culture, and environmental change since 1492* (Cambridge, 1987), 219; C. Bridenbaugh & R. Bridenbaugh, *No peace beyond the line: the English in the Caribbean, 1624-1690* (New York, 1972), 268.

[214] R. Dirks, *The black saturnalia: conflict and its ritual expression on British West Indian slave plantations* (Gainesville, 1987), 16.

away under the sugar-orientated social and economic structures.[215] A clear result of woodland clearance was the ruination of the soils and the erosion of the top layer.[216] In Martinique, this ultimately meant the soil could not retain moisture, leaving settlements entirely susceptible to droughts.[217] Aside from the demands of cultivation, these sorts of frontier societies inevitably needed resources necessary for the sustenance of society such as fuel. Much was imported (e.g. coal from England), though many trees were still cut for necessary building timber.[218] Indeed, instead of concentrating on resource management in line with reclamation activity, interest groups looked to more intense labour exploitation (through slaves) to recompense declining fertility.[219] The ecological changes stimulated by reclamation and frontier societies in the Caribbean had profound consequences for the peasant subsistence societies which emerged after the emancipation of the slaves, who found themselves working tiny plots (in marginal areas) and faced with entirely eroded and degraded soils, making survival much more difficult.[220] The same sight of hillsides washes away by erosion after reclamation was seen in large parts of Portuguese Brazil.[221] In some cases such as the expansion of the North American frontier into areas such as California, the pursuit of just one highly valuable resource put the inhabitants at high

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[215] M. Moreno Fraginals, *The sugarmill. The socioeconomic complex of sugar in Cuba, 1760-1860* (New York, 1976), 76-7.

[216] See D. Harris, *Plants, animals, and man in the Outer Leeward Islands, West Indies* (Los Angeles, 1965).

[217] C. Kimber, *Martinique revisited: the changing plant geographies of a West Indian island* (College Station, 1988), 180-1.

[218] R. Sheridan, *Sugar and slavery: an economic history of the British West Indies, 1623-1775* (Baltimore, 1973), 115.

[219] B. Richardson, *Caribbean migrants: environment and human survival on St. Kitts and Nevis* (Knoxville, 1983), 56-7.

[220] See on this issue, B. Richardson, 'Slavery to freedom in the British Caribbean: ecological considerations', *Caribbean Geography*, 1 (1984), 164-75.

[221] W. Dean, *With broadax and firebrand: the destruction of the Brazilian Atlantic forest* (Berkeley, 1995); J. Augusto Padua, 'European colonialism and tropical forest destruction in Brazil', in J. McNeill, J. Augusto Padua & M. Rangarajan (eds.), *Environmental history: as if nature existed* (Oxford, 2010), 130-50.

risk.[222] Once the gold was mined to extinction, the settlements that once supported the settlers were soon abandoned, becoming so-called 'ghost towns'.[223]

Figure 2.1 Abandoned farms at Bodie, California[224]

Short-termist strategies for exploiting as much as society could out of a finite amount of resources also led to situations whereby no favourable institutions were laid down for protecting settlements, such as water management structures. If they were laid down, then they were entirely mal-configured. Water management responsibilities fell away in polarised pre-industrial societies, particularly when characterised by high levels of absentee landownership. Certainly this argument has been supported by empirical research on reclamation of the polders in coastal regions of the Low Countries, with this precise thesis being put forward by Tim Soens in particular.[225] As Soens carefully shows, the water management system broke down

[222] On the ecological problems associated with the Gold Rush, see R. Dasmann, 'Environmental changes before and after the Gold Rush', in J. Rawls, J. Orsi & M. Smith-Baranzini (eds.), *A golden state: mining and economic development in gold rush California* (Los Angeles, 1999), 105-22.

[223] J. Lachman, 'Golden promises, abandoned dreams: a brief history and portfolio of photographs of Bodie, California', *California History*, 73.4 (1994), 308-21; R. Nadeau, *Ghost towns and mining camps of California* (Los Angeles, 1965).

[224] Taken by 'Photographersnature.com'. [creative commons 3.0 license].

[225] In particular, T. Soens, *De spade in de dijk? Waterbeheer en rurale samenleving in de Vlaamse kustvlakte (1280-1580)* (Ghent, 2009); 'Polders zonder poldermodel? Een onderzoek naar de rol van inspraak en overleg in de waterstaat van de laatmiddeleeuwse Vlaamse kustvlakte (1250-1600)',

simultaneously when property began to be consolidated in the hands of rich urban burghers and institutions and worked by a group of large tenant farmers.[226] Absentee owners had less interest in investing their income derived from the rents back into effective water management, thereby leaving the reclaimed polders highly susceptible to environmental collapse.[227] The ferocity of the storm surges and flooding in coastal Zeeland and Flanders was testament to this.[228]

The resource exploitation strategies of polarised-dynamic societies also exposed larger amounts of the population to risks, by removing a large section of society from the means of production (i.e. the land). Not only did land come to be consolidated in the hands of rich absentee investors (often urban),[229] but new property constellations were also created in the countryside. Land was often divided up into large farms, which were exploited indirectly by leasing them out to large

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Tijdschrift voor Sociale en Economische Geschiedenis, 4 (2006), 3-36; 'Explaining deficiencies of water management in the late medieval Flemish coastal plain (13th-16th centuries)', *Jaarboek voor Ecologische Geschiedenis* (2005/6), 35-62; 'Floods and money: funding drainage and flood control in coastal Flanders from the thirteenth to the sixteenth centuries', *Continuity & Change*, 26.3 (2011), 333-65. Related to this is the more recent revision of the so-called Dutch 'poldermodel' in M. van Tielhof, 'Op zoek naar het poldermodel in de waterstaatsgeschiedenis', *Tijdschrift voor Geschiedenis*, 122 (2009), 149-61; P. van Dam, 'Water en land', *Bijdragen en Mededelingen Betreffende de Geschiedenis der Nederlanden*, 124 (2009), 459-66.

[226] For this process see T. Soens, 'The origins of leasehold in the former county of Flanders', in B. van Bavel & P. Schofield (eds.), *The development of leasehold in Northwestern Europe, c. 1200-1600* (Turnhout, 2008), 19-38; E. Thoen, 'Social agrosystems as an economic concept to explain regional differences. An essay taking the former county of Flanders as an example (Middle Ages-19th century)', in B. van Bavel & P. Hoppenbrouwers (eds.), *Landholding and land transfer in the North Sea area (late Middle Ages-19th century)* (Turnhout, 2004), 47-66.

[227] Soens, *De spade in de dijk*, 73-105; 'Floods and money', 348-50.

[228] See J. Buisman & A. van Engelen, *Duizen jaar weer, wind en water in de lage landen* (2 vols. Franeker, 1996-2000); A. de Kraker, 'Flood events in the Southwestern Netherlands and coastal Belgium, 1400-1953', *Hydrological Sciences Journal*, 51 (2006), 913-29; M. Gottschalk (ed.), *Stormvloeden en rivieroverstrommingen in Nederland, 500-1700* (3 vols, Assen, 1971-7); M. van Tielhof, 'Texel, kerstavond 1593. De ramp die Tesselschade haar nam gaf', in M. Damen & L. Sicking (eds.), *Bourgondie voorbij. De Nederlanden 1250-1650. Liber alumnorum Wim Blockmans* (Hilversum, 2010), 311-24; J. De Bruin & D. Aten, *Een gemene dijk? Verwikkelingen rond de dijkzorg in West-Friesland. De watersnood van 1675-1676* (Purmerend, 2004).

[229] S. Ciriacono, *Acque e agricoltura. Venezia, l'Olanda e la bonfica europea in Età Moderna* (Milan, 1994), 208-42; M. van Tielhof & P. van Dam, *Waterstaat in stedenland. Het hoogheemraadschap van Rijnland voor 1857* (Utrecht, 2006), 152-79; C. Dekker & R. Baetens, *Geld in het water. Antwerps en Mechels kapitaal in Zuid-Beveland na de stormvloeden in de 16de eeuw* (Hilversum, 2010), 219-25. More generally, see J. Richards, *The unending frontier: an environmental history of the early modern World* (Berkeley, 2003).

tenant farmers – some of whom in time became actual owners of the land.[230] Equally, those tenants who did not become owners but remained within short-term lease contracts often caused environmental problems: as the contract came to an end the tenant had all the incentives to reap as much as he could through over-exploitation to the detriment of long-term sustainability.[231]

Consequently, the only option for the landless inhabitants of the villages was to work on the tenant farms as wage labourers. This laid the seeds for political unrest as proletarian workers (both agricultural and urban) were forming conscious identities as a social group, and were beginning to revolt against the political mainstream in nineteenth century Europe.[232] However, as capital investment in labour-saving devices took hold, alongside a frequent conversion to pastoral and dairy-based farming, the opportunities to secure work (particularly in the winter) were highly reduced. Provision for the poor was often dependent on the charity of large farmers, which was further dependent on their economic fortunes.[233] This set the foundation certainly in the early modern period in Western Europe of rural settlements being entirely decimated by outward migration towards the cities.[234] By the nineteenth century, the poor were looking even further afield – attempting to find their fortune through a dangerous journey across the Atlantic to Argentina or America.[235]

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[230] P. van Cruyningen, *Behoudend maar buigzaam. Boeren in West-Zeeuws-Vlaanderen* (Wageningen, 2000); 'Profits and risks in drainage projects in Staats-Vlaanderen, c. 1590-1665', *Jaarboek voor Ecologische Geschiedenis* (2005/6), 123-42; G. Chittolini, 'Alle origini delle 'grandi aziende' della bassa lombarda: l'agricoltura dell'irriguo fra XV e XVI secolo', *Quaderni Storici*, 39 (1978), 828-44; E. Occhipinti, 'L'economia agraria in territorio milanese fra continuità e spinte innovative', in *Milano ed il suo territorio in età comunale* (Spoleto, 1989), 245-63; C. Baars, 'Oorspronkelijke verkaveling en grootte van de bezittingen in enige polders in Noord-Holland', *Landbouwkundig Tijdschrift*, 92 (1981), 193-201; M. Gietzelt (ed.), *Geschichte Dirtmarschens* (Heide, 2000), 206-9.

[231] Rijpma, 'Funding public services', 141. In effect, one of the reasons cited for adopting sharecropping contracts instead in P. Hoffman, 'The economic theory of sharecropping in early modern France', *Journal of Economic History*, 44 (1984), 303-19.

[232] J. Dunbabin, 'The revolt of the field: the agricultural labourers' movement in the 1870s', *Past & Present,* 26 (1983), 68-97; P. Lane, 'Agricultural labourers and rural violence, 1850-1914', *Studia Hibernica*, 27 (1993), 77-87.

[233] R. Paping, *Voor een handvol stuivers: de levensstandaard van boeren, arbeiders en middenstanders op de Groninger klei, 1770-1860* (Groningen, 1995), 289-90.

[234] See, for example, S. Hochstadt, *Mobility and modernity. Migration in Germany, 1820-1989* (Michigan, 1999); P. Rosental, *Les sentiers invisibles. Espace, familles, et migrations dans la France du 19e siècle* (Paris, 1999).

[235] See M. Wokeck, *Trade in strangers: the beginnings of mass migration to North America* (University Park, Pennsylvania, 1999).

C: Managing resources in egalitarian-dynamic societies: flexible strategies

Pre-industrial societies classified as egalitarian-dynamic had the **flexibility** and freedom to respond to demographic, environmental, or commercial changes in a 'pro-active' way. While egalitarian-persistent societies used strategies to limit exposure to potentially disturbing forces such as the market or to negate the effects of population pressure on finite resources, egalitarian-dynamic societies could flexibly move exploitation strategies to account for changes – and even benefit from the emergence of markets, for example. As a result, these societies produced settlements which drew their resilience in the face of crises from the adaptive strategies devised for economic exploitation of resources. It was a case of adaptation to survive.

There were two main flexible strategies for managing resources that egalitarian-dynamic societies employed, both somewhat inter-related. The first was an expansion and a widening of the economic portfolios (on a regional level), but in contrast to the egalitarian-persistent societies, a specialisation of production on the household or individual producer level. The second was a movement towards rural proto-industrialisation – taking a step away from traditional agriculture. Essentially economic activities could be adapted to changing economic conditions such as rising or falling wages and prices, or environmental degradation, or the emergence of new markets. For example, in late-medieval and early-modern Holland, where the subsidence of the peat made arable farming difficult for the peasant farmers,[236] the local population transformed the economy into one dominated by proto-industry to such an extent that by the onset of the sixteenth century, 50 percent of the rural population were working 'outside agriculture'.[237] This can be connected to a series of

[236] D. de Boer, *Graaf en grafiek. Sociale en economische ontwikkelingen in het middeleeuwse 'Noordholland' tussen 1345 en 1415* (Leiden, 1978), 222; P. van Dam, 'Sinking peat bogs: environmental change in Holland, 1350-1550', *Environmental History*, 6.1 (2001), 32-45.

[237] J.L. van Zanden, *Arbeid tijdens het handelskapitalisme. Opkomst en neergang van de Hollandse economie, 1350-1850* (Bergen, 1991), chp. 1; 'A third road to capitalism? Proto-industrialisation and the moderate nature of the late medieval crisis in Flanders and Holland, 1350-1550', in Hoppenbrouwers & van Zanden (eds.), *Peasants into farmers?*, 85-101; 'Taking the measure of the early modern economy. Historical national accounts for Holland in 1510/14', *European Review of Economic History*, 6 (2002), 135-9; B. van Bavel, 'Early proto-industrialization in the Low Countries? The importance and nature of non-agricultural activities on the countryside in Flanders and Holland', *Revue Belge de Philologie et d'Histoire*, 81.4 (2003), 1109-65. A decent overview of the literature on the late-medieval transition of the Holland economy can be found in M. Gubbels, 'Boeren, bezit en bodemproblemen. Verklaringsmodellen voor de transitie van de Hollandse economie in de late middeleeuwen', *Historisch Tijdschrift Holland*, 42 (2010), 65-84.

weak urban guilds, which were unable or unwilling to prevent rural production of items like cloth and beer, and furthermore, were not able to put any restrictions on the mobility and actions of workers.[238] Specialisation and investment in the late Middle Ages was further enhanced by the well-functioning and unrestricted markets for capital.[239] This kind of adaptive strategy for managing resources often occurred in those places which faced land hunger or the soil was very poor for cultivation.[240] In contrast to the egalitarian-continuous societies which tried to protect themselves from the market, egalitarian-dynamic societies exploited the market in order to stand a better chance of survival. Indeed, this is entirely the hypothesis laid out by Erik Thoen for the labour intensive cultivation of tiny plots of cash crops in inland Flanders, an effective way of dealing with the high levels of land fragmentation due to population pressure in the region.[241] Through these sorts of adaptive changes made in egalitarian-dynamic societies, settlements were resilient against potentially disruptive events such as the deterioration of the natural environment.

D: Managing resources in polarised-persistent societies: restrictive-coercive strategies

Societies classified as polarised-persistent were dominated by interest groups, who were interested in maintaining the status quo. In the absence of a wide range of techniques available, interest groups made recourse to **restrictive or coercive strategies** to their grip on power and wealth. Through these restrictions, the rest of

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[238] de Munck et al. 'The establishment and distribution of graft guilds'; van Bavel, 'Rural wage labour', 65-6.

[239] Zuijderduijn, *Medieval capital markets*, 242-6.

[240] J. Marfany, 'Is it still helpful to talk about proto-industrialization? Some suggestions from a Catalan case study', *Economic History Review*, 63.4 (2010), 948; D. Terrier, *Les deux ages de la proto-industrie. Les tisserands du Cambrésis et du Saint-Quentinois, 1730-1880* (Paris, 1996), 78-99; A. Panjek, 'Not demesne but money: land and peasant economies in early modern western Slovenia', *Agricultural History Review*, 59.2 (2011), 305-7.

[241] E. Thoen, 'A commercial survival economy in evolution. The Flemish countryside and the transition to capitalism (Middle Ages-19th Century)', in Hoppenbrouwers & van Zanden (eds.), *Peasants into farmers?*, 102-57; 'The birth of 'Flemish husbandry': agricultural technology in medieval Flanders', in G. Astill & J. Langdon (eds.), *Medieval farming and technology: the impact of agricultural change in Northwest Europe* (Leiden, 1997), 69-88; E. Thoen & E. Vanhaute, 'The Flemish husbandry at the edge: the farming system on small holdings in the middle of the nineteenth century', in B. van Bavel & E. Thoen (eds.), *Land productivity and agro-systems in the North Sea area (Middle Ages – 20th century). Elements for comparison* (Turnhout, 1999), 271-96. Foreign observers even referred to the Flemish small-plots system as 'horticulture', for example, in J. David, *Boeken betreffende de Belgische landbouw verschenen voor 1850* (Louvain, 1974), 81-7.

society was unable to find the room to implement adaptive strategies, and this lack of flexibility left large sections of the population exposed to potential exogenous disasters such as harvest failure and flooding. However, on the other hand, coercion could be used by powerful interest groups to force subordinates into doing things which improved the sustainability of the society, such as maintaining water defence features. As a result, these societies produced settlements which were more resilient in the face of crises than settlements in polarised-dynamic societies, but more exposed than settlements in egalitarian-dynamic and egalitarian-persistent societies – essentially 'moderately vulnerable'.

For example, just as in 'egalitarian-persistent' societies, the open field system could also become a feature of 'polarised-persistent' societies. Powerful interest groups such as manorial lords were often influential in laying out the open fields (the manorial demesne was often divided into small plots and mixed in with tenant plots), and was organised often in negotiation with the village communities.[242] Often the strips were regularly distributed in the fields, highly suggestive of planning from above.[243] Furthermore, in societies dominated by signorial authorities, quite often there were concessions made by the lords for their subjects to make use of their wastes and to allow access to woodland resources at certain times of the year.[244] Signorial lords in many areas of Western Europe also stimulated the concentration of inhabitants into fortified villages (*incastellamento*), often on hill-tops, for the purpose of collecting a labour force large enough to colonise new areas, or simply as a way of crystallising and securing territorial power.[245] This made the settlements more

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[242] The strips were often measured out in the first instance by lords, see A. Nash, 'Customary measure and open field strip size in Sussex', *Sussex Archaeological Collections*, 121 (1983), 109-17.

[243] See M. Gardiner, 'Planned medieval land division in Withyham, East Sussex', *Sussex Archaeological Collections*, 123 (1985), 109-14; W. Meibeyer, 'Der Rundling – eine koloniale Siedlungsform des hohen Mittelalters', *Niedersachsiches Jahrbuch für Landesgeschichte*, 44 (1972), 27-49; M. Harvey, 'Regular field and tenurial arrangements in Holderness, Yorkshire', *Journal of Historical Geography*, 6.1 (1980), 3-16.

[244] Menant, 'Les chartes de franchises', 239-40; V. Fumagalli, *Terra e società nell'Italia padana. I secoli IX e X* (Turin, 1976), 62-3; Occhipinti, 'Fortuna e crisi di un patrimonio monastico', 302-1; C-R. Bruhl & C. Violante (eds.), *Honorantie Civitatis Papiae* (Tübingen, 1983), 20; M. Venditelli, 'Diritti ed impianti di pesca degli enti ecclesiastici Romani tra X e XIII secolo', *Mélanges de l'École Francaise de Rome. Moyen Age*, 104 (1992), 407.

[245] See L. Feller, *Les abruzzes médiévales – territoire, économie et société en Italie centrale du IX au XII siècle* (Rome, 1998), chp 6; P. Toubert, *Dalla terra ai castelli. Paesaggi, agricoltura e poteri nell'Italia medievale* (Turin, 1997); A. Settia, *Castelli e villaggi dell'Italia padana: popolamento, potere e sicurezza fra IX e XIII secolo* (Naples, 1984); D. Andrews, 'Castelli e incastellamento nell'Italia centrale' in R. Comba (ed.) *Castelli storia e archeologia* (Cuneo, 1981), 123-36; M. Bourin, *Villages médiévaux en Bas-Languedoc : genèse d'une sociabilité : Xe-XIVe siècle. 1, Du château au village : Xe-*

defensible, and allowed for investment in defensive structures such as walls and castle towers. In Japan, domain lords (*daimyo*) even tried to exact financial contributions from their subjects in order to rebuild structures, especially after bouts of warfare.[246] A key concern was raising sufficient revenues to perform obligatory public works that benefited agriculture.[247] In that sense, polarised-continuous societies dominated by elites who exploited their resources through coercive strategies, had interest groups which saw the benefits of helping sustain their village communities. After all, the power of manorial lords and lay aristocrats was often built on the back of subordinate peasants.

Polarised-persistent societies also had interest groups which created strategies for investing in structures necessary for the resilience and protection of settlements, such as water management structures. Elite aristocratic landlords were able to confirm impositions on colonists – forcing them to dig and maintain canals.[248] Colonists were fined and lost usufruct rights if land was not tilled.[249] Near Mantova, the monastery of S. Benedetto in Polirone forced rural communities to clear land near the Po River and repair the dikes.[250] In a land grant from the same monastery, every inhabitant of Villabona had to build and maintain dikes to protect their fields.[251] Lords were able to use reclamation projects to move and settle whole communities in new areas, thereby strengthening their territorial presence.[252] Lords also took

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XIIe (L'Harmattan, 1987); A. Bazzana, P. Guichard & J-M. Poisson, *Habitats fortifiés et organisation de l'espace* (Maison de l'Orient, 1983); I. Martin Viso, 'Riflessioni sull'incastellamento nella penisola iberica: la Castiglia dell'Ebro e la Transierra di Madrid', *Archeologia Medievale*, 28 (2001), 83-110; B. Kreutz, *Before the Normans: Southern Italy in the ninth and tenth centuries* (Philadelphia, 1991), 134-5.

[246] W. Hauser, 'Osaka Castle', in J. Mass & W. Hauser (eds.), *The Bakufu in Japanese history* (Stanford CA, 1985), 153-72.

[247] M. Berry, 'Public peace and private attachment: the goals and conduct of power in early modern Japan', *Journal of Japanese Studies*, 12 (1986), 237-71.

[248] W. Dugsdale, *The history of imbanking and draining* (London, 1772), 69-71; J. Galloway, 'Storm flooding, coastal defence and land use around the Thames estuary and tidal river c. 1250-1450', *Journal of Medieval History*, 35.2 (2009), 178.

[249] F. Panero, *Terre in concessione e mobilità contadina. Le campagne fra Po, Sesia, e Dora Baltea (secoli XII e XIII)* (Bologna, 1984), 84-94; V. Fumagalli, 'L'evoluzione dell'economia agraria e dei patti colonici dall'alto al basso Medioevo. Osservazioni su alcune zone dell'Italia settentrionale', in B. Andreolli, V. Fumagalli & M. Montanari (eds.), *Le campagne italiane prima e dopo il Mille. Una società in trasformazione* (Bologna, 1985), 1032-3.

[250] Castagnetti, *Le comunità rurali dalla soggezione signorile*, 7.

[251] P. Torelli (ed.), *Regesto mantovano. Le carte degli archive Gonzaga e di Stato in Mantova e dei monasteri Mantovani soppressi (Archivio di Stato in Milano)*, i (Rome, 1914), 365-6.

[252] T. Bacchi, 'Conquista del territorio e modificazione dei modelli impeditive. Le aziende fondiarie nel Ferrarese (secoli XI-XII)', in Andreolli et al. (eds.), *Le campagne italiane*, 144-9.

advantage of ancient communal and collective duties such as water management by reasserting them as signorial obligations – effectively imposing their will on collective organisation.[253] After the conquest of Lleida in the twelfth century, the Counts of Barcelona and Urgell made sure they maintained and improved the irrigation structure for the surrounding villages.[254]

Urban governments also tried to enforce labour works on rural communities in the interests of water management. In the second half of the eleventh century, Pavia asked nearby communities to work the locks of the Ticino River.[255] Rural communities became compelled in the thirteenth and fourteenth centuries to colonise wastes, as attested to in the city-statutes.[256] The Statutes of Reggio Emilia ordered assarting of trees near to the village of Rivalta.[257] Cities invested in the construction of canals to expand irrigation of the fields.[258] Cities also struck up agreements with large rural landowners, such as the pact between Bologna and a consortium of lords who agreed to work on a canal that brought water from the Reno River to the city.[259] Elsewhere the Statutes of Parma from the thirteenth century indicated that any rural communities that benefited from the canal which ran across the lands of Sant'Ilario, Taneto, and Prato Ottesola, had to maintain the structure.[260] The Statutes of Ferrara around the same time clearly show that officials of the city had to discuss with the inhabitants of local communities any matters regarding the improvement of water

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[253] F. Provero, 'Le corvées nelle campagne dell'Italia settentrionale', in M. Bourin & P. Martinez Sopena (eds.), *Pour une antropologie du prélèvement seigneurial dans les campagnes médiévales (XIe-XIVe siècles). Réalités et representations paysannes* (Paris, 2004), 375-7.

[254] J. Bolòs, 'Changes and survival: the territory of Lleida (Catalonia) after the twelfth-century conquest', *Journal of Medieval History*, 27.4 (2001), 328. Also see A. Virgili, 'Ad detrimendum Yspanie. La cruzada de Turtusa y la feudalización de la región de Tortosa (1148-1200)', in *L'incastellamento. Actes des rencontres de Gérone (1992) et de Rome (1994)* (Rome, 1998), 112.

[255] P. Grillo, 'Comuni urbani e poteri locali nel governo del territorio in Lombardia (XII-inizi XIV secolo)', in L. Chiappa Mauri (ed.), *Contado e città in dialogo. Comuni urbani e comunità rurali nella Lombardia medievale* (Milan, 2003), 45-6.

[256] V. Fumagalli, 'Il paesaggio si trasforma. Colonizzazione e bonifica durante il Medioevo. L'esempio emiliano', in Andreolli et al. (eds.), *Le campagne italiane*, 104-5; G. Fantoni, *L'acqua a Milano. Uso e gestione nel basso medioevo (1385-1535)* (Bologna, 1990), 39.

[257] A. Campanini (ed.), *I rubricari degli statute comunali di Reggio Emilia (secc. XIII-XVI)* (Reggio Emilia, 1997), 31-58; A. Cerlini (ed.), *Consuetudini e Statuti reggiani del sec. XIII* (Milan, 1933), 23.

[258] P. Boucheron, 'Water and power in Milan, c. 1200-1500', *Urban History*, 28 (2001), 180-93; F. Menant, *Campagnes lombardes du Moyen Age. L'économie et la société rurales dans la région du Bergame, de Crémone et de Brescia du Xe au XIIIe siècle* (Rome, 1993), 197-200.

[259] D. Balestracci, 'La politica delle acque urbane nell'Italia comunale', *Mélanges de l'Ecole Francaise de Rome. Moyen Age*, 104 (1992), 442.

[260] *Monumenta Historica ad provincias parmensem et Placentia pertinentia* (Parma, 1860), 382.

management, and furthermore, it is indicated that rural communities were supposed to provide a labour force to work the embankments of the rivers.[261] Coercion could lead to the construction of an infrastructure which helped with the resilience of settlements against environmental problems such as flooding – however, it must also be noted that this infrastructure was still to some extent precarious. For example, in England it has been shown that when manorial lords took a step back from direct management of their demesnes, the rationale for investing in the physical structures needed to stave off environmental problems also went away.[262]

The coercive nature of 'polarised-persistent' societies also inadvertently stimulated the emergence of some important structures from the bottom-up. Indeed, in medieval Western Europe, the formalisation of local signorial territories and jurisdictions led to the crystallisation of the rural commune, which was either an outgrowth of signorial structures or established in direct opposition as a counterweight to the powers of the banal *signorie*.[263] As a result, settlements began to crystallise themselves into more stable and coherent concentrations, which can be explained 'less in the power of the *signoria* itself, than in the growing sense of coherence and local identity of the inhabitants of the territories focused on the seigniorial centre'.[264] Territorial crystallisation leading to settlement concentration, often informed by coercive structures from above, compelled and enabled villagers to work more closely together, particularly in coordinating agricultural activities and regulating access to ever scarcer resources.[265] Despite the emergence of these institutions from below,[266] the 'communal' function of villages was still often maintained under direction of strong lordships.[267] However, it has recently been suggested that the vertical hierarchy of serfdom, which deployed communal social capital to enforce manorial interests in exchange for benefits enjoyed by the

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[261] R. Zupko & R. Laures, *Straws in the wind. Medieval urban environmental law. The case of Northern Italy* (Boulder, 1996), 69.

[262] Note the chronology in J. Galloway & J. Potts, 'Marine flooding in the Thames estuary and tidal river, c. 1250-1450: impact and response', *Area*, 39 (2007), 370-9.

[263] van Bavel, *Manors and markets,* 93.

[264] C. Wickham, *The mountains and the city: the Tuscan Appennines in the early Middle Ages* (Oxford, 1988), 339.

[265] van Bavel, *Manors and markets,* 93.

[266] The types of which are well discussed in de Moor, 'The Silent Revolution'; A. Greif, *Institutions and the path to the modern economy: lessons from medieval trade* (Cambridge, 2006); P. Blickle, *From the communal reformation to the revolution of the common man* (Leiden, 1998), chp. 12.

[267] As noted in W. Steurs, *Naissance d'une region. Aux origines de la mairie de Bois-le-Duc. Recherches sur Brabant septentrional aux 12 et 13 siècles* (Brussels, 1993).

'communal oligarchy', often simply benefited the village elites and the manorial lords, but to the detriment and increased vulnerability of the poorer common folk.[268]

Indeed, 'polarised-persistent' societies were also based around restrictive strategies for managing resources – restrictions which could stop people from making the necessary adaptations to ensure survival and made them more vulnerable. First of all, many (though certainly not all) manorialised societies supported demesne agriculture, which meant that subordinate tenants were required to provide the labour (to varying degrees) to work these fields for the lord or ecclesiastical institution – taking time out of their own fields. This work was often a customary and obligatory duty, and tenants did not receive any remuneration for it (wage labour on the demesnes comes only becomes significant in late-medieval Europe). Even where the demesne system was not employed or the lord did not own much landed property, exploitation still took place through a system referred to as 'banal lordship'. Even without land, lords still upheld a number of customary rights and jurisdictions, all of which ate into the surplus of the tenants.[269] These rights were multifarious and ranged from basic recognition fees (as a way of expressing fidelity to the lord), death and marriage duties, transaction fees for the transfer of land, as well as a number of other extra-economic obligations. These extra-economic obligations lowered the subsistence line for inhabitants of all the settlements located within 'polarised-persistent' societies, making more people exposed to crises, and therefore increasingly the likelihood of societal decline.

Another of the restrictive strategies employed in 'polarised-persistent' societies was the limitations on economic activities. Manorial lords punished members of rural communities for production without license.[270] Local communities in need of wood for fuel and housing were prevented from going into forests with signorial restrictions, and were actively punished for doing so.[271] Often this simply led to unregulated poaching and pilfering instead.[272] In areas of Europe such as Northern

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[268] See T. Dennison & S. Ogilvie, 'Serfdom and social capital in Bohemia and Russia', *Economic History Review*, 60.3 (2007), 513-44.

[269] Preventing adaptive strategies such as marketing of goods by tenants. Brenner, 'Agrarian class structure', 45; W. Kula, *An economic theory of the feudal system. Towards a model of the Polish economy, 1500-1800* (London, 1976), 119.

[270] P. Schofield, 'The social economy of the medieval village in the early fourteenth century', *Economic History Review*, 61 (2008), 42.

[271] J. Birrell, 'Peasant deer poachers in the medieval forest', in R. Britnell & J. Hatcher (eds.), *Progress and problems in medieval England* (Cambridge, 1996), 68-88.

[272] J-M. Lalanne, 'Le domaine des Prémontrés de Belval aux XIIe et XIIIe siècles', *Annales de l'Est*, 36 (1984), 305; E. Zadora-Rio, 'Parcs à gibier et garennes à Lapins: contribution à une étude archéologique des territoires de chasse dans le paysage médiéval', *Hommes et Terres du Nord*, 2-3 (1986), 134.

Italy and Flanders, the economic portfolio was entirely limited by urban guild restrictions.[273] As Venice began to expand its terraferma in the fifteenth century, it made sure it rigorously regulated all economic activities within its rural hinterlands.[274] Some of the strongest blocks to economic activities in the countryside were imposed in the areas around Mantova, and there is evidence in the late Middle Ages of legal proceedings being started up against entrepreneurs from small communities in the *contado* making cheap woollen cloth.[275] In fact, manufacturing did not appear in the countryside of Mantova until the eighteenth century, in the form of silk.[276] The rural *contado* of Bologna was also rigorously controlled, and the production of important goods such as silk was almost entirely concentrated within the city itself.[277] Those rural people who defied the guilds were resented, such as the shoemakers operating around Milan and Mantova who were regarded as parasites by the shoemaking guilds.[278] For the most disadvantaged of rural inhabitants in the Po Valley, the only real solution was migration. Most of the significant proto-industries emerged away from the plains and in the mountains:[279] limestone processing around Lake Maggiore, silk textile in Trentino,[280] silver and copper mining in the mountains north of Vicenza,[281] and iron production north of Bergamo and Brescia.[282] Elsewhere,

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[273] P. Malanima, *La decadenza di un'economia cittadina: l'industria di Firenze nei secoli XVI-XVIII* (Bologna, 1982), 154; van Bavel, ''Early proto-industrialization in the Low Countries?', 1124-6; J.L. van Zanden & M. Prak, 'State formation and citizenship: the Dutch Republic between medieval communes and modern nation states', in J.L. van Zanden, *The long road to the Industrial Revolution: the European economy in a global perspective, 1000-1800* (Leiden, 2009), 212.

[274] S. Ciriacono, 'Venise et ses villes. Structuration et déstructuration d'un marché regionale (XVIe-XVIIIe si□cle)', *Revue Historique*, 276 (1986), 288-9.

[275] C. Belfanti, 'Town and country in central and northern Italy, 1400-1800', in Epstein (ed.), *Town and country*, 311.

[276] C. Belfanti, 'Dalla città alla campagna: industrie tessili a Mantova tra carestie ed epidemie (1550-1630)', *Critica Storica*, 25 (1988), 443-53.

[277] C. Poni, 'Per la storia del distretto industriale serico di Bologna (secoli XVI-XIX)', *Quaderni Storici*, 25 (1990), 98-9.

[278] E. Merlo, *Le corporazioni. Conflitti e soppressioni a Milano nei Sei e Settecento* (Milan, 1996), 44; C. Belfanti, *Mestieri e forestieri. Immigrazione ed economia urbana a Mantova fra Sei e Settecento* (Milan, 1994), 103-10.

[279] As noted in G. Chittolini, 'Quasi-città. Borghi e terre in area lombarda nel tardo medioevo', *Società e Storia*, 13 (1990), 3-26.

[280] D. Sella, *Commerci e industrie a Venezia nel secolo XVII* (Venice, 1961), 80-1.

[281] R. Vergani, *Miniere e società nella montagna del passato. Alpi venete, secoli XIII-XIX* (Verona, 2003), chp. 8.

[282] W. Panciera, 'Il lanificio bergamasco nel XVII secolo: lavoro, consumi e mercanti', in *Storia economica e sociale di Bergamo. Il tempo della Serenissima* (Bergamo, 2000), 100-7; M. Calegari, 'Forni 'alla bresciana' nell'Italia del XVI secolo', *Quaderni Storici*, 70 (1989), 77-99; J-F. Belhoste, 'Le

regulations by dominant colonial authorities such as in twentieth-century Java or Dutch East India Company-occupied Taiwan prevented those who could not afford the license to hunt in the woodlands.[283] Thus, it is clear that the restrictive strategies used for managing and exploiting resources in 'polarised-persistent' pre-industrial societies limited the capacity for populations to adapt to new conditions and inhibited their flexibility – in turn leaving the settlements more exposed to unexpected crises, and many living a precarious existence with the only option left to move to new areas, frequently the city.[284]

2.5 Summary of hypothesis

In this thesis it is suggested first of all that pre-industrial society can be divided into four basic types, based on an assessment of how egalitarian or polarised (i.e. a test of equality), and dynamic or persistent (i.e. a test of change) a number of its key configurations were (four in total – property, power, commodity markets, modes of exploitation). These particular 'types of societies' ended up exploiting resources in different ways. The 'egalitarian-persistent' societies exploited their resources using protectionist strategies with one eye on risk avoidance and risk management. As a result, they produced very resilient settlements over the long-term, particularly in the face of exogenous crises such as harvest failures and pestilences, though possibly did not change much. The 'polarised-dynamic' societies exploited their resources using short-termist strategies with the intention of interest groups reaping as much as they possibly could from finite resources, but at the same time exposing the wider population to more risk. As a result, they produced settlements which possibly could rise up very quickly through short-term economic gain, but also were susceptible to rapid decline – maybe even total collapse. The 'egalitarian-dynamic' societies exploited their resources flexibly by responding to change – often taking production in new directions. As a result, they produced adaptable settlements which could grow organically and furthermore got their resilience from the inherent adaptability of

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migrazioni dei fabbri bergamaschi in Delfinato', in G. Fontana, A. Leonardi & L. Trezzi (eds.), *Mobilità imprenditoriale e del lavoro nelle Alpi in età moderna e contemporanea* (Milan, 1998), 49.

[283] P. Boomgaard, 'Oriental nature, its friends, and its enemies: conservation of nature in late-colonial Indonesia, 1889-1949', *Environment & History*, 5 (1999), 273; H-W. Koo, 'Deer hunting and preserving the commons in Dutch colonial Taiwan', *Journal of Interdisciplinary History*, 42.2 (2011), 185-203.

[284] As what happened in large parts of sixteenth-century Northern Italy described in G. Alfani, 'Population and environment in Northern Italy during the sixteenth century', *Population*, 62.4 (2007), 559-95; E. Guidoboni, 'Human factors, extreme events and floods in the lower Po Plain (Northern Italy) in the 16th century', *Environment & History*, 4 (1998), 279-308.

society. Finally, 'polarised-persistent' societies tended to exploit their resources using repression and enforced restriction. As a result, they produced entirely dependent settlements which could benefit from structures necessary for long-term resilience (laid down through coercion), but at the same time faced inbuilt restrictions on their decision-making processes, which could lead to a failure to adapt to new conditions, and therefore exposure to settlement decline or even collapse. These settlements, therefore, were moderately vulnerable to exogenous crises.

Through the next five chapters, the empirical research on five case studies is performed, which allows us in the final chapter to test whether this explanatory framework for the resilience or susceptibility of settlements to collapse is at all convincing.

Chapter 3
Florence and its hinterlands in the late Middle Ages: contrasting fortunes in the Tuscan countryside, 1300-1580

"...la città e come il centro, posta nel mezzo di tutte. Le quale essendo cinta di mure et di belli borghi, sono poi li borghi circundati dalle ville, et da esse ville similmente l'altre terre et castelli, le quali tutte chose sono come da uno maggiore circulo da l'ultima circunstante regione circundate..."

"...the city is like the centre, positioned at the middle of everything. The city is bounded by walls, and by beautiful suburbs, and then the suburbs themselves are surrounded by villas, and similarly from these villas are the other lands and castles, of which all this is surrounded by one great circle of outlying regions..."

L. Bruni, *Panegirico della città di Firenze*, 1403

A major preoccupation for scholars of the pre-industrial period is the relationship between cities or towns and the countryside.[285] In some cases, urban and rural environments were connected to each other in a mutually beneficial way. From approximately the tenth century onwards, new towns began to appear and proliferate across Western Europe, and urbanising trends continued well into the thirteenth century.[286] These towns swelled in size and numbers through the integration of urban markets and agriculture.[287] The surpluses from newly specialised agrarian enterprises helped sustain increasing numbers of 'non-productive' citizens in urban agglomerations,[288] while historical literature has now shown how urban growth in demand encouraged agricultural development.[289] Higher quality grains were grown for wealthier urban consumers.[290] Urban demand for meat supported a pastoral economy and the development of cattle rearing.[291] Markets emerged catering for horse-breeding.[292] Even seemingly uncompromising rural regions such as the East Anglian Breckland and the South Holland peat-lands benefitted from urban demand for rabbits, fish, or even proto-industrial produce such as bricks and textiles.[293]

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[285] An excellent historiography presented in S. Epstein, 'Introduction', in *Town and country*, 4-9.

[286] Jones, *The Italian city-state*, 94-6; C. Dyer, 'How urbanized was medieval England?', in J. Duvosquel & E. Thoen (eds.), *Peasants and townsmen in medieval Europe* (Ghent, 1995), 169-83; A. Verhulst, 'The origins of towns in the Low Countries and the Pirenne thesis', *Past & Present*, 122 (1989), 3-36. 'The origins and early development of medieval towns in northern Europe', *Economic History Review*, 47 (1994), 362-73.

[287] R. Britnell, 'Urban demand in the English economy, 1300-1600', in J. Galloway (ed.), *Trade, urban hinterlands and market integration c.1300-1600* (London, 2000), 1.

[288] P. Clark, *European cities and towns: 400-2000* (Oxford, 2009), 44-5.

[289] See, in particular, B. Campbell, J. Galloway, D. Keene & M. Murphy, *A medieval capital and its grain supply: agrarian production and distribution in the London region, c. 1300* (London, 1993); van Zanden, *The long road to the Industrial Revolution*, 3. A study which gives real significance to urban demand for commercial expansion is J. Masschaele, *Peasants, merchants, and markets: inland trade in medieval England, 1150-1350* (New York, 1997).

[290] B. Campbell, 'Matching supply to demand: crop production and disposal by English demesnes in the century of the Black Death', *Journal of Economic History*, 57 (1997), 827-58; D. Keene, 'Medieval London and its region', *London Journal*, 14 (1989), 103-4. Driven also by the brewing trade; see, J. Galloway, 'London's grain supply: changes in production, distribution and consumption during the fourteenth century', *Franco-British Studies*, 20 (1995), 23-34.

[291] M. Kowaleski, *Local markets and regional trade in medieval Exeter* (Cambridge, 1995), 293-300; B. Campbell, 'Commercial dairy production on medieval English demesnes: the case of Norfolk', *Anthropozoologica*, 16 (1992), 109.

[292] Dijkman, *Shaping medieval markets*, 60-1; van Bavel, 'Land, lease and agriculture', 36.

[293] J.L. van Zanden, *The rise and decline of Holland's economy. Merchant capitalism and the labour market* (Manchester, 1993), chp. 2; B. van Bavel & J.L. van Zanden, 'The jump-start of the Holland economy during the late-medieval crisis, c. 1350 – c. 1500', *Economic History Review*, 57 (2004), 505;

Of course the above story is an idealistic picture. Towns were not always well-supplied by their surrounding countryside, sometimes expanding through long-distance imports.[294] Furthermore, as some cities and towns grew stronger through the course of the Middle Ages, the relationship between urban environments and the rural hinterlands could become far more exploitative.[295] Urban territorial expansion effectively decimated some rural societies, either through the imposition of taxes or the avaricious consolidation of land, woods and pastures,[296] leading to settlement abandonment and rural migration towards the city in search of work. From the high Middle Ages onwards, the guilds of some cities and towns safeguarded the manufacture of certain products such as cloth as an urban preoccupation, thereby effectively blocking the development of rural cloth-making.[297] Urban producers became increasingly concerned at the flow of rurally-produced cheap cloth into the cities.[298] Other towns allowed rural production to take place, but imposed monopolies to get exclusive access to the produce, thereby stopping rural producers from securing the best price.[299]

It is clear that in the pre-industrial period, cities and the countryside sometimes enjoyed a mutually beneficial relationship, though in other cases the urban-rural dynamic was far more exploitative. Why did some rural societies benefit from increasing urban influence while others were reduced to poverty and decay? That is a question explored in this chapter by comparing the fortunes of two rural regions of Tuscany between the fourteenth and sixteenth centuries, and how they were affected in different ways by the growth of Florence. A contrast is drawn between the Florentine '*contado*', an area of plains and hills encircling Florence,

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M. Bailey, 'The rabbit and the medieval East Anglian economy', *Agricultural History Review*, 36 (1988), 1-20.

[294] For example, for Ghent, see M. Tits-Dieuaide, *La formation dex prix céréaliers en Brabant et en Flandre au XVe siècle* (Brussels, 1975). For seventeenth-century Amsterdam, see M. van Tielhof, *The 'mother of all trades': the Baltic grain trade in Amsterdam from the late 16th to the early 19th century* (Leiden, 2002); J. Faber, 'Het probleem van de dalende graanaanvoer uit de Oostzeelanden in de tweede helft van de zeventiende eeuw', *AAG Bijdragen*, 9 (1963), 3-28.

[295] Epstein, 'Cities, regions and the late medieval crisis', 3-50.

[296] For example, see Scott, *Freiburg and the Breisgau*, 31-46.

[297] Epstein, 'Town and country', 466-9; van Bavel, 'Early proto-industrialization in the Low Countries?', 1124-6; D. Nicholas, 'Economic reorientation and social change in fourteenth century Flanders', *Past & Present*, 70 (1976), 8-11.

[298] S. Epstein, 'Manifatture tessili e strutture politico-istituzionali nella Lombardia tardo-medievale: ipotesi di ricerca', *Studi di Storia Medievale e di Diplomatica*, 14 (1993), 19.

[299] Paping, 'Parasiteren op het platteland?', 112; Blanshei, *Perugia, 1260-1340*, 15, 61; Redon, *Uomini e comunità del contado senese*, 217.

which suffered settlement contraction and abandonment in the late Middle Ages, and a mountainous region (in the '*distretto*') more distant from Florence known as the Casentino Valley, which actually experienced the crystallization of settlement into concentrated villages around flourishing local markets, which encouraged barter and specialisation.[300]

The chapter is organised as follows. First, the growth and development of the city of Florence between the high and late Middle Ages is plotted. In the second section, the pattern of settlement in the *contado* is described for the period before 1300, followed by an account of the contraction and decline in habitation in the late Middle Ages. The third section focuses on settlement development in an area of the *distretto*, namely the Casentino Valley, and is split into two parts. Part A describes the settlement situation in the valley prior to the fourteenth century, (i.e. from 1000 to 1300). Part B reveals how habitation became concentrated into coherent villages in the late Middle Ages (fourteenth to sixteenth centuries) around emerging market centres. In the fourth section, the reasons for the divergent settlement development in the two rural areas of Tuscany are considered. Why did settlements in the *contado* decay in the late Middle Ages, while a blossoming series of villages appeared in the Casentino? The explanation is divided up into four key configurations: (i) property distribution, transfer, and access (ii) modes of exploitation, (iii) economic portfolios, and (iv) power balances. It is suggested through the course of the chapter that the society of the *contado* was ill-equipped to stave off the predatory demands of Florence, while the Casentino Valley was made up of a number of egalitarian and flexible constellations that supported its strong position against the city.

3.1 Florence: urbanisation and the growth of the city-state

Even after the political, economic and demographic disruption caused by the decline of the Western Roman Empire, Italy remained 'a land of cities', with a distinctive urbanised character in the early Middle Ages.[301] Nonetheless, it was not until the tenth century that the urban population of northern and central Italy really

[300] The link between medieval settlement concentration and specialisation of production has been made in C. Higounet, 'Congregare populationem. Politiques de peuplement dans l'Europe méridionale, Xe-XIVe siècle'. *Annales de Démographie Historique* (1979), 135-44.

[301] For the 'land of cities' line, see C. Hegel, *Geschichte der Städtverfassung von Italien* (Leipzig, 1847), 474. Also on the same theme, see C. Wickham, *Early medieval Italy* (London, 1981), 4-5.

expanded, possibly doubling between 1000 and1300.[302] By 1300, around one-fifth of northern and central Italy's population lived in cities; three times the level of urbanisation seen in other parts of Western Europe[303] Tuscany conformed to this general trend of urbanisation between 1000 and 1300, and furthermore was one of the most densely populated regions of Europe before the Black Death, supporting 60 people per square kilometre around 1300.[304] In the twelfth century however, Florence was still arguably the least important of all the major Tuscan cities (consisting of Lucca, Pisa, Arezzo, Prato, Siena). It was only in the thirteenth century that it grew in size and significance, increasing from 10,000 to 110,000 inhabitants between 1175 and 1300.[305] By 1300, Florence had risen to almost 'metropolitan' status, and was the home to companies (such as the Peruzzi) with world trading interests and leading banking agencies.[306]

As Florence grew during the thirteenth century, so did its need for supplies of food and produce. Evidence from the fourteenth century suggests that Florence was consuming annually 4000 oxen, 60,000 sheep, 20,000 goats, 30,000 pigs, and 25 million quarts of wine, as well as 1300 bushels of grain daily.[307] As a result, the city became more reliant on its trading network with southern Italy which provided large quantities of grain and pottery.[308] Other products such as spices, (some) textiles,

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[302] P. Malanima, 'Urbanisation and the Italian economy during the last Millennium', *European Review of Economic History*, 9 (2005), 99-102; P. Jones, 'La storia economica: dalla caduta dell'impero romano al secolo XV', in *Storia d'Italia* (Turin, 1974), 1682.

[303] van Bavel, 'Markets for land', 505. Except for Flanders, see van Zanden, *The long road to the Industrial Revolution*, 40.

[304] Epstein, *Freedom and growth*, 71.

[305] G. Petralia, 'Lo sviluppo dell'economia toscana medievale', in G. Petralia, E. Guarini & P. Pezzino (eds.), *Storia della toscana: dalle origini al Settecento*, i (Rome, 2004), 119-20. Also on the demographic development of Florence, see W. Day Jr., 'The population of Florence before the Black Death: survey and synthesis', *Journal of Medieval History*, 28 (2002), 93-129.

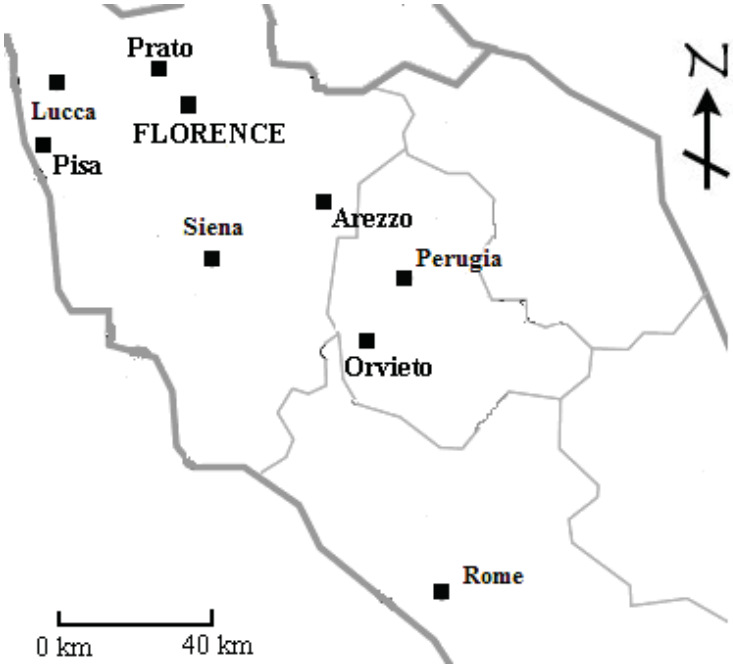
[306] M. Luzzati, 'Firenze e le origini della banca moderna', *Studi Storici* (1987), 43-34; C. de la Roncière, *Un changeur florentin du trecento: Lippo di Fede del Sega (1285 env.- 1363 env.)* (Paris, 1973); E. Hunt, *The medieval super-companies: a study of the Peruzzi company of Florence* (Cambridge, 2002).

[307] See R. Lopez, 'The trade of medieval Europe: the South', in: *The Cambridge Economic History: trade and industry in the Middle Ages*, eds. M. Postan & E. Miller (vol. 2, Cambridge, 1987), 369; G. Pinto, *Il libro del Biadaiolo: carestie e annona a Firenze dalla metà del '200 al 1348* (Florence, 1978), 77; C. de la Roncière, 'Le vignoble florentin et ses transformations au XIVe siècle' in *Le vin au Moyen Age: production et producteurs* (Grenoble, 1978), 126.

[308] D. Abulafia, 'Southern Italy and the Florentine economy, 1265-1370', *Economic History Review*, 34 (1981), 377-88; R. Britnell, 'The towns of England and northern Italy in the early fourteenth century', *Economic History Review*, 64 (1991), 29. However, it must be noted that the north had from at least the days of the Roman Republic exploited the South for grain. See E. Gabba, 'La Sicilia romana', in M. Crawford (ed.), *L'impero romano e le strutture economiche e sociali delle provincie* (Como, 1986), 72.

paper, and stone were imported in from Asia.[309] The problem with this reliance on imports was acutely felt when prices were high, however.[310] Furthermore, food shortages were common, forcing the Florentine government to fall back on its international networks for needed supplies.[311]

Figure 3.1 Major medieval cities and towns of central Italy



An obvious solution was to be more self-sufficient in the production of food, something which could be achieved by a more intensive exploitation of the surrounding countryside in Tuscany.[312] By 1300, the Florentine administration began to extend their influence and authority over the countryside, extending their jurisdictions, acquiring rights to uncultivated marshes and woods, and levying taxes in kind and in coin.[313] As is explained in the next section however, Florence did not affect the entire Tuscan countryside in exactly the same way. In some places Florentine influence caused rural decay and ruin, while other areas withstood the

[309] M. Balard, 'Le commerce du blé en mer Noire (XIIIe-XVe siècles)', in F. Melis (ed.), *Aspetti della vita economica medievale: studi nell'archivio Datini di Prato* (Florence, 1985), 64-80.

[310] R. Goldthwaite, 'I prezzi del grano a Firenze dal XIV al XVI secolo', *Quaderni Storici,* 10 (1975), 5-36.

[311] G. Pinto, 'Commercio del grano e politica annonaria nella Toscana del Quattrocento: la corrispondenza dell'ufficio fiorentino dell'Abbondanza negli anni 1411-1412', in *Città e spazi economici nell'Italia comunale* (Bologna, 1996), 97-122.

[312] de la Roncière, 'Alimentation et ravitaillement à Florence', 185.

[313] The best works of reference on this are Jones, *The Italian city-states*; Tabacco, *Egemonie sociali.*

exploitative tendencies of the city, and even indirectly benefited from the growth of Florence.

3.2 Contraction, decay, and abandonment: the Florentine *contado* and rural-urban migration

Although the Florentine territory by 1427 extended for around 11,000 square kilometres, only around 4,900 of this was considered '*contado*'.[314] Indeed, the *contado* represented only the plains and hills closely encircling the city of Florence, running from Empoli and Prato in the west to the Arno and Sieve rivers in the east.[315] The *contado* was distinct from the *distretto* in that it was the rural areas which had formerly been under feudal jurisdiction before coming under the Florentine commune's control, while the more distant *distretto* only was brought under control much later.[316] Some parts of Tuscany never came under Florentine dominion, such as the Republic of Lucca, while the State of Siena was not conquered outright until 1555.[317]

In the Florentine *contado*, the evidence for decay and ruin from the beginning of the fourteenth century onwards is in the contracting settlements and long demographic downturn. Before 1300, the landscape of the *contado* was a patchwork of *castelli* or *castri* (fortified villages perhaps with a castle), open or loosely clustered villages known as *casali*, small hamlets, and some isolated aristocratic structures such as *curtes* or ecclesiastical granges.[318] In accordance with the general trend in

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[314] R. Griffeth, *The city-state in five cultures* (Santa Barbara, 1981), 108.

[315] J. Najemy, *A history of Florence, 1200-1575* (Oxford, 2006), 97.

[316] G. Brucker, *Renaissance Florence* (Berkeley & Los Angeles, 1969), 5; C. de la Roncière, *Prix et salaires à Florence au XIVe siècle (1280-1380)* (Rome, 1982), ix-x.

[317] A. Maria Pult Quaglia, 'Early modern Tuscany: 'regional' borders and internal boundaries', in S. Ellis & R. Eβer (eds.), *Frontiers, regions and identities in Europe* (Pisa, 2009), 130-1.

[318] Around 2400 *castelli* have been identified in the historical record for Tuscany, many of which were sited in the Florentine *contado*. See D. Osheim, 'Rural Italy', in D. Abalafia (ed.), *Italy in the central Middle Ages* (Oxford, 2004), 163; R. Francovich, A. Augenti, R. Farinelli & M. Cortese, 'Verso un atlante dei castelli della Toscana: primi risultati', in *Il Congresso Nazionale di Archeologia Medievale* (Pisa, 1997), 97-101. Many of the concentrated fortified settlements may have developed before the typical *incastellamento* period (the tenth and eleventh centuries), perhaps as early as the seventh or eighth centuries. See R. Francovich, 'The beginnings of hilltop villages in early medieval Tuscany', J. Davis & M. McCormick (eds.), *The long morning of medieval Europe: new directions in early medieval studies* (London, 2008), 55-82; R. Francovich & R. Hodges, *Villa to village* (London, 2003), 61-74; M. Valenti, *L'insediamento altomedievale nelle campagne toscane. Paesaggi, popolamento e villaggi tra VI e X secolo* (Florence, 2004).

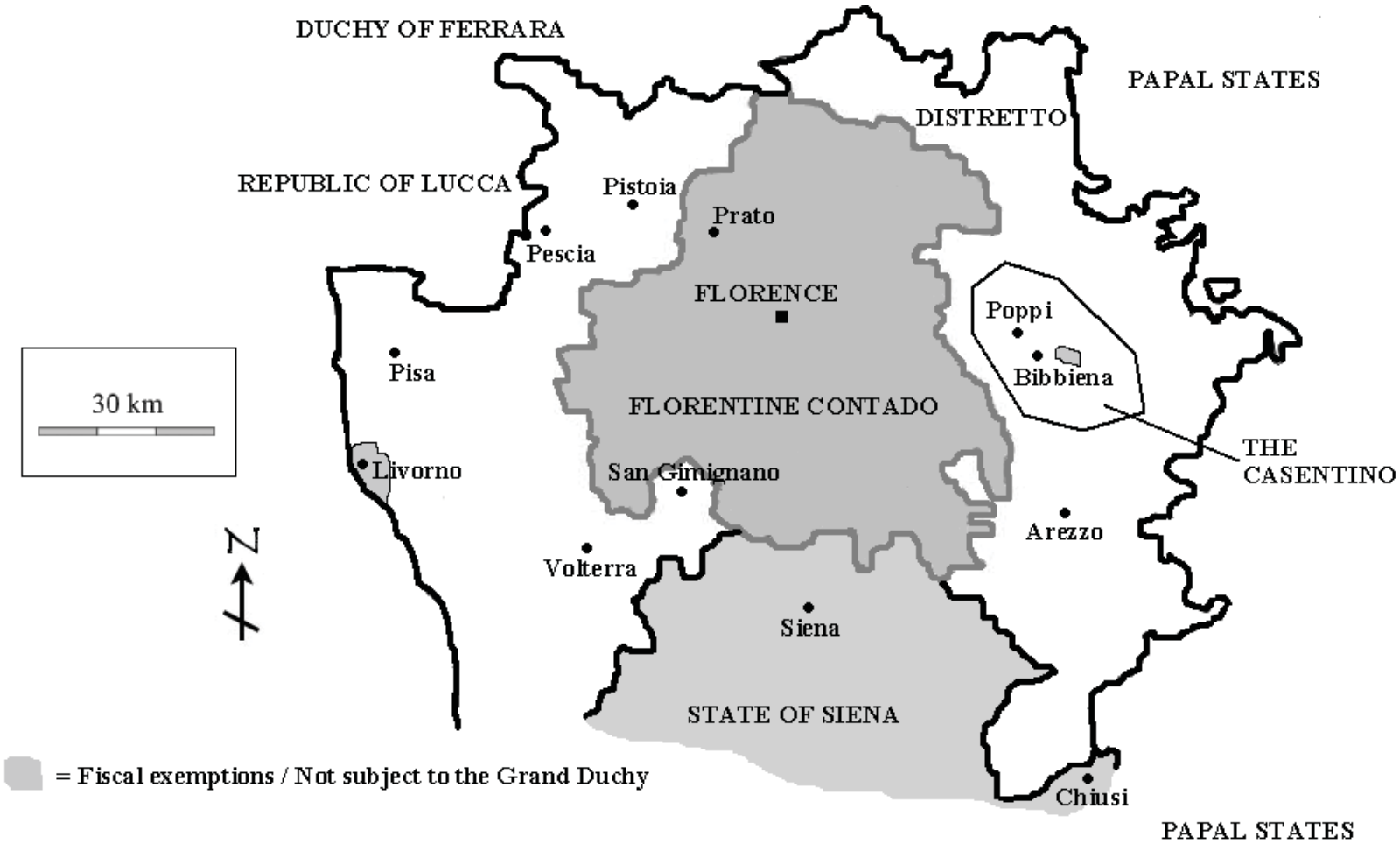

Figure 3.2 Florentine territories (*contado* and *distretto*), 1574[319]

[319] Boundaries based on E. Fasano Guarini, 'The Grand Duchy of Tuscany at the death of Cosimo I (1574)', *Journal of Italian History*, 2 (1979), enclosed.

Western Europe, many of these population centres grew in size between the eleventh and thirteenth centuries, thus by 1300, the countryside was teeming with rural folk. However, after 1300, the settlement patterns in the Florentine *contado* began to change. The rural population was simply decimated through the course of the fourteenth century through the combination of severe pestilence, poor harvests, and harsh Florentine fiscal oppression, so much so that by the time of the Florentine Catasto in 1427, the population may have been a third of what it was at the end of thirteenth century.[320] The combination of heightened tax pressure (particularly in the second half of the fourteenth century)[321] and reduced populations made the Florentine fiscal demands unbearable for many inhabitants of the countryside, a situation worsened by the fact that urban property in the countryside was exempted from tax.[322] The relationship between Florence and its close rural hinterlands from the fourteenth century onwards has long been seen as defective.[323] Florentine oppression of its *contado* was much more severe than the relationships between other Tuscan towns and their hinterlands in this period.[324] Indeed, the dominant 'city-state' acted in the same way as an extractive 'feudal lord', using financial muscle and harsh jurisdictions to basically milk the countryside dry.[325]

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[320] For examples of rural population decline, see D. Herlihy, 'Population, plague and social change in rural Pistoia, 1201-1430', *Economic History Review*, 18 (1965), 225-44; *Medieval and Renaissance Pistoia: the social history of an Italian town, 1200-1430* (New Haven 1967), 64-6; E. Fiumi, 'La popolazione del territorio volterrano-sangimignanese ed il problema demografico dell'età comunale', in *Studi in onore di A. Fanfani*, i (Milan, 1962), 248-90; 'La demografia fiorentina nelle pagine di Giovanni Villani', *Archivio Storico Italiano*, 108 (1950), 78-158; G. Pardi, 'La peste del 1348 e la popolazione del contado fiorentino', *Bollettino dell'Unione Statistica della Città Italiane*, 2-3 (1921), 38-43.

[321] Including despised '*gabelles*'. See C. de la Roncière, 'Indirect taxes or '*gabelles*' at Florence in the fourteenth century: the evolution of tariffs and the problems of collection', in N. Rubinstein (ed.), *Florentine studies: politics and society in Renaissance Florence* (London, 1968), 185-9.

[322] A. Molho, *Florentine public finance in the early Renaissance, 1400-1433* (New York, 1971), 23-36.

[323] See the negative views offered in M. Becker, *Florence in transition*, ii (Baltimore, 1968), 181-8; Molho, *Florentine public finances*, 24.

[324] W. Caferro, 'City and countryside in Siena in the second half of the fourteenth century', *Journal of Economic History*, 54.1 (1994), 85-103; C. Meek, *Lucca, 1369-1400* (Oxford, 1978), 112.

[325] Epstein, 'Cities, regions and the late medieval crisis'; 'Town and country'.

As a result, village settlements collapsed and farm plots were abandoned.[326] Land went uncultivated for lack of tenants.[327] Fortified villages (castra) became almost deserted refuges.[328] In Pistoia (just north of Florence), inhabitants fell from 37,598 in 1244 to just 8969 in 1404.[329] Rural people fled to the city in search of work, hoping to be absorbed into urban building industries.[330] Florence was no respite for the impoverished country-folk, however, as increased migration into the city simply caused real wages to sink, the level of pauperism and crime to rise, which in turn deepened the antagonism between rich and poor.[331] As early as the thirteenth century, Florentine hospitals and charitable foundations swelled with the impoverished and destitute.[332] Even the richer members of rural society began to uproot to the city, unimpressed with the heightened tax demands put upon them as a result of de-population.[333]

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[326] Herlihy, 'Santa Maria Impruneta'; E. Conti, *I catasti agrari della Repubblica fiorentina e il catasto particellare toscano (sec. 14-19). La formazione della struttura agraria moderna*, iii (Rome, 1966), 78; L. Kotel'nikova, 'Tendenze progressive e regressive nello sviluppo socio-economico della Toscana nei secoli xiii-xv (campagna e città nella loro interdipendenza)', in A. Guarducci (ed.), *Sviluppo e sottosviluppo in Europa e fuori d'Europa dal secolo XIII alla rivoluzione industriale* (Florence, 1983), 124-7; C. Klapisch-Zuber & J. Day, 'Villages désertés en Italie: esquisse', in Romano & Corbin (eds.), *Villages désertés*, 442-3, 437-8; Klapisch-Zuber, 'Villaggi abbandonati'.

[327] P. Jones, 'Florentine families and Florentine diaries in the fourteenth century', *Papers of the British School at Rome*, 24 (1954), 196; ASF, Catasto, no. 307, fo. 438r.

[328] Jones, *The Italian city-state*, 166.

[329] Herlihy, Population, plague'.

[330] For immigration into the towns and cities of Tuscany, see P. Guarducci & V. Ottanelli, *I servitori domestici della casa borghese toscana nel basso medioevo* (Florence, 1982), 19-30; M. Nenci, 'Ricerche sull'immigrazione dal contado alla città di Firenze nella seconda metà del XIII secolo', *Studi e Ricerche*, 1 (1981), 139-77. On building industries, see S. Cohn, *The labouring classes in Renaissance Florence* (New York, 1978), 69.

[331] C. de la Roncière, 'Pauvres et pauvreté à Florence au XIVe siècle', in M. Mollat (ed.), *Études sur l'histoire de la pauvreté* (Paris, 1974), 661-745; 'Condition des salairiés à Florence au XIVe siècle', in *Il tumulto dei Ciompi: un momento di storia fiorentina ed europea* (Florence, 1981), 13-40; C. Caduff, 'I 'pubblici latrones' nella città e nel contado di Firenze a metà Trecento', *Ricerche Storiche* 18.3 (1988), 505, 515.

[332] R. Trexler, 'The foundlings of Florence', *The History of Childhood Quarterly*, 1 (1973), 260; B. Pullan, 'Support and redeem: charity and poor relief in Italian cities from the fourteenth to the seventeenth century', *Continuity & Change*, 3 (1988), 177; J. Henderson, *Piety and charity in late medieval Florence* (Oxford, 1994).

[333] Herlihy, 'Santa Maria Impruneta', 266-9; J. Plesner, *L'émigration de la campagne à la ville libre de Florence au XIIIe siècle* (Copenhagen, 1934).

The impression of the *contado* during the late Middle Ages seems to be one of widespread impoverishment.[334] The Catasto of 1427, in particular, tells a general story of rural misery, instability and insecurity in the Florentine close countryside, many on the verge of famine and supported only by charity.[335] Only four percent of Tuscan movable wealth was in the hands of *contado* inhabitants, rural people had no liquid assets, and the constant demand for rents and taxes drained the countryside of coins.[336] The population of the *contado* declined all the way up to the mid-fifteenth century and was only able to recover much later, at some stage during the first half of the sixteenth century.[337]

3.3 Blossoming villages and markets: the Casentino Valley and the concentration of settlement

The more distant rural areas of Tuscany which came much later under Florentine jurisdiction were known as the '*distretto*', and were often mountainous. This applied to the area known as the Casentino Valley, 30 kilometres east of Florence, where some of its communes such as Poppi were only brought under Florentine administration as late as 1440.[338] The evidence for the argument that parts of the distretto responded more favourably to the rise of the city of Florence is that some areas did not suffer the same settlement contraction and abandonment as described for the *contado* in the late Middle Ages. Pestilence did reach these mountain communities, and Florentine taxation in the *distretto* was an even higher rate than in the *contado*.[339] Yet Samuel Cohn has shown that mountain people of northern and

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[334] D. Herlihy & C. Klapisch-Zuber, *Les Toscans et leurs families: une étude du 'catasto' florentine de 1427* (Paris, 1978), 241-60, 272-9.

[335] G. Brucker, 'Florentine voices from the 'Catasto', 1427-1480', *I Tatti Studies: Essays in the Renaissance*, 5 (1993), 11-32; 'Bureaucracy and social welfare in the Renaissance: a Florentine case study', *Journal of Modern History*, 55 (1983), 1-21; M. Mazzi, 'Ai margini del lavoro: i mestieri per 'campare la vita', *Studi Storici*, 27 (1986), 359-69.

[336] Van Bavel, 'Markets for land', 519.

[337] D. Herlihy & C. Klapisch-Zuber, *Tuscans and their families: a study of the Florentine Catasto of 1427* (London, 1985), 73.

[338] G. Benadusi, *A provincial elite in early modern Tuscany: family and power in the creation of the state* (Baltimore, 1996), 22.

[339] For plague in the *distretto*, see G. Cherubini, 'La carestia del 1346-47 nell'inventario dei beni di un monastero del contado aretino', *Rivista di Storia dell'Agricoltura*, 10.2 (1970), 178-93. For higher taxation in the mountains compared to the plains, see S. Cohn, 'Inventing Braudel's mountains: the Florentine Alps after the Black Death', in S. Cohn & S. Epstein (eds.), *Portraits of medieval and Renaissance living. Essays in honour of David Herlihy* (Ann Arbor, 1996), 404.

eastern Tuscany did not migrate in droves to Florence, in contrast to the picture of impoverishment that Giovanni Cherubini has painted.[340] If people of the *distretto* were forced to move on, they simply chose another mountain village, sometimes even crossing the mountain passes into Romagna.[341] In fact, in the Casentino Valley from around 1300 onwards blossomed a wide network of concentrated villages, which were often compacted around small coherent market centres, catering towards local, regional and urban demand.

This section is divided into two. First, the settlement situation in the period 1000 to 1300 is elaborated upon. In the second part, the changes in settlement structure from (roughly) the fourteenth century are discussed.

A: Dispersed settlements, 1000-1300

The Casentino Valley is a mountainous region of east Tuscany, situated 50 kilometres east of Florence, and bordering Emilia Romagna. The valley is bisected by the Arno River, which flows to Florence.[342] The geographical link with Arezzo was strong even in the early Middle Ages due to a straight (possibly Roman) road which connected the town and the valley.[343] The core of the Casentino is a wide basin running from Stia in the north to Bibbiena in the south, which the Arno River follows, although the Casentino does extend 10 km south of Bibbiena. Important too are the smaller connecting side valleys such as the Solano and Archiano which run into the basin, and have long supported the weight of the area's population. It is only from the mid-

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[340] For the positive view of Tuscan mountain society, see S. Cohn, *Creating the Florentine State: peasants and rebellion, 1348-1434* (Cambridge 1999), 55-112; 'Highlands and lowlands in late medieval Tuscany', in D. Broun & M. MacGregor (eds.), *Mìorun Mòr nan Gall, 'The great ill-will of the lowlander'? Lowland perceptions of the highlands, medieval and modern* (Glasgow, 2007), 110-27; 'Insurrezioni contadine e demografia: il mito della povertà nell montagne toscane (1348-1460)', *Studi Storici*, 36 (1995), 1023-49. Also for a related theme on religious institutions and piety in the mountains see S. Cohn, 'Piety and religious practice in the rural dependencies of Renaissance Florence', *EHR*, 114 (1999), 1121-42. For mountain poverty, see G. Cherubini, 'Il montanaro della novellistica', in R. Zagnoni (ed.), *Homo Appenninicus. Donne e uomini delle montagne* (Pistoia, 2008), 7-15.

[341] S. Cohn, 'Demography and the politics of fiscality', in W. Connell & A. Zorzi (eds.), *Florentine Tuscany: structures and practices of power* (Cambridge, 2000), 187.

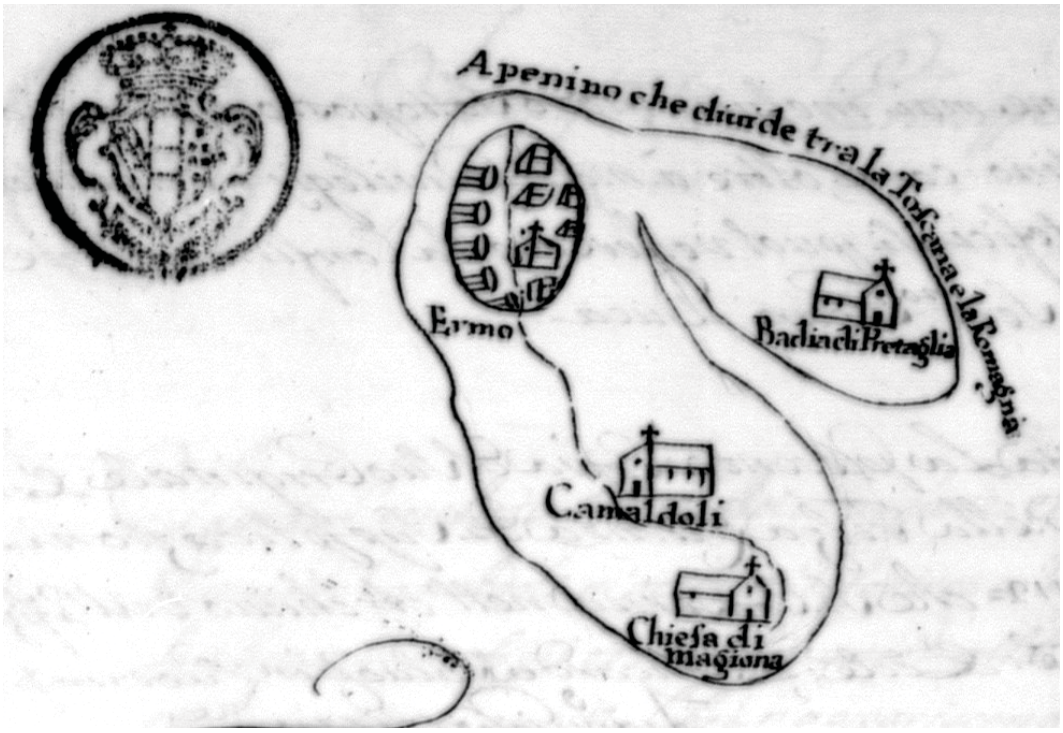
[342] See the description in D. Alghieri, *The divine comedy of Dante Alghieri. Purgatorio*, ed. B. Moser (Los Angeles, 1982), chapter 5; nos 124-6. On the bordering mountains see G. Barbieri, *La Toscana: le regioni d'Italia* (Turin, 1964), 53-4, 364-66.

[343] A. Fatucchi, *Le strade romane del Casentino* (Arezzo, 1974); M. Lopes Pegna, *Le strade romane del Valdarno* (Florence, 1971). Also on the road through the Casentino to Arezzo see A. Galerani & B. Guidi, 'Relazioni e rapporti all'ufficio dei Capitani di Parte Guelfa: il principato di Fernando I', in G. Spini (ed.), *Architettura e politica da Cosimo I a Ferdinando I* (Florence, 1976), 259-329.

twentieth century that people left these side-valleys and re-settled in the bigger centres in the valley-bottom, such as Bibbiena and Soci.[344]

Prior to the fourteenth century, settlement was dispersed across the landscape in the Casentino. An excellent source for the reconstruction of the valley between the eleventh and thirteenth centuries is the book of charters belonging to the great landowning monastery of Camaldoli (founded in 1005).[345] In this '*Regesto di Camaldoli*', over 55 percent of the houses mentioned during the eleventh century were positioned outside of the castle walls and identifiable by the name given to the field in which they were located.[346] Some of the field-names closer to the Arno were lost later in the eleventh and twelfth centuries due to flooding of the river banks.[347]

Figure 3.3 The hermitage and monastery of Camaldoli in the Casentino Valley[348]



[344] Compare P. Lavoratti, *Il Casentino. Studio di geografica locale* (Rome, 1961), 114-21; ISTAT, *11° censimento generale della popolazione*, iii (Rome, 1974), 73-84.

[345] On the foundation by Romualdo di Ravenna see G. Tabacco, 'Romualdo di Ravenna e gli inizi dell'eremitismo camaldolese', in *L'eremitismo in Occidente nei secoli XI e XII* (Milan 1965), 117-8; 'La data di fondazione di Camaldoli', *Rivista di Storia della Chiesa in Italia*, 16 (1962), 451-5; W. Kurze, 'Campus Malduli. Die frühgeschichte Camaldolis', *Quellen und Forschungen aus Italienischen Archiven und Bibliotheken*, 44 (1964), 1-34; G. Vedovato, *Camaldoli e la sua congregazione dalle origini al 1184. Storia e documentazione* (Cesena, 1994), 16-21.

[346] My data from L. Schiaparelli, F. Baldesseroni & E. Lasinio (eds.), *Regesto di Camaldoli* (4 vols, Rome, 1907-22).

[347] RC, i, 15, 19, 50-1, 112, 145, 160, 228, 387, 416, ii, 763, 805, 862, 937.

[348] Image taken from the '*Feudo di Moggiona*', ASF, Consiglio di Reggenza, no. 40.

Most of the charter references mention *castelli* (fortified villages) or *casali* (often open villages) by name, which gives each settlement a clear territorial definition. However a high number of houses are mentioned as being located in specific fields (*avocabula*) pertaining to that settlement. For example, it was noted at Ornina in 1030 that 'there are…2 houses, and 3 enclosed lands and vines, and 4 pieces of land that are positioned in the territory of the people of S. Leozheri situated at Plano in the casale Ornina…one of these houses and enclosures are in the fields that are known as Runco'.[349] A concept of a village or settlement is offered (the *casale* Ornina), but the evidence suggests that the houses were built on specific fields, in this case at Runco. Runco was likely a new cultivated and settled area of Ornina in comparison to some of the other toponyms, as the word originates from the Latin word '*runcare*', referring to deforestation and reclamation.[350]

If the *casale* Ornina was at all a concentrated settlement in the eleventh century, there would have been no need to label houses in specific fields or locations. Houses would just be listed as been present within the confines of the village, perhaps with the most topographic information afforded being next to whom their house was positioned. Between 1027 and 1041 houses at Ornina were mentioned in 11 separate charters, each listed as located within its own *avocabulum* and each in a different place.[351] Three of these dwellings were clearly positioned within their own enclosure. The *casale* of Ornina did not appear to have had a physical centre at all, being just a scattered layer of dwellings in different fields known as Antreriora, Arconiano, Lavaclo, Petra Rondinaia, Posticcio, Pratella, Sigalare, Faito, Runco, Arconiano and Plano. Ornina was at the extreme end of the dispersed spectrum. The settlement of Contra also had a dispersed pattern. Between 1013 and 1099 houses were mentioned nine times, seven of which were located in separate fields.[352] Freggina also had housing mentioned nine times between 1019 and 1047, six located on *avocabula*.[353]

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[349] RC, i, no. 108. My translation of the latin.

[350] F. Saggioro, 'Ricognizioni, paesaggi ed esperienze di ricerca nei territori di pianura tra Veneto e Lombardia', in N. Mancassola & F. Saggiorio (eds.), *Medioevo, paesaggi e metodi* (Padova, 2006), 79-81; 'Insediamenti, proprietà ed economie nei territori di pianura tra Adda e Adige (VII-IX secolo)', in G. Brogiolo, A. Chavarria & M. Valenti (eds.), *Dopo la fine delle ville. Evoluzione nelle campagne tra VI e IX secolo* (Mantova, 2005), 90; M. Montanari & M. Baruzzi, 'Silva runcare. Storie di cose, di parole e di immagini', in B. Andreoli & M. Montanari (eds.), *Il bosco nel medioevo* (Bologna, 1988), 101.

[351] RC, i, nos 88, 108, 131, 196.

[352] *Idem*, nos 31, 35, 94, 118, 125, 126, 152, 184, 457, 621.

[353] *Idem*, nos 49, 52, 149, 232, 235, 237, 240.

Gello had 12 houses listed from 1019 to 1099, of which ten were in specific fields.[354] Ventrina also was a clearly dispersed settlement for all but one of its 11 houses mentioned between 1009 and 1078 were recorded in specific fields.[355] Very little sign of concentrated settlement can be taken from the documents for the eleventh century Casentino, perhaps only at Monte in the Partina area. One of *avocabula* at Monte known as 'Musileo' became an independent *casale* in the 1080s. Corezzo and Contra too were listed as *avocabula* at various points in the eleventh century, though eventually in the twelfth century established themselves as independent *casali*.[356] The change from *avocabulum* to *casale* status is not outright proof of increased concentration of settlement: indeed it may be that these sites had simply more houses attributed to them but continued to be distributed in a dispersed pattern.

Castle-building was a common process in the valley during the eleventh and early twelfth centuries, but this did not stimulate settlement concentration. Although the big ecclesiastical institutions did not involve themselves in this process, castles were built by territorial lords such as the Bishop of Arezzo and smaller local lords. The castle-building process in the Casentino can be divided into two key phases. Phase one was the earliest castles built by the Bishop of Arezzo, big feudal families such as the Guidi or donations by emperors such as Henry II.[357] These castles were largely built before 1050: Sarna (980), Marciano (1008), Nibbiano (1011), Castel Focognano (1028), Strumi (1029) and Montecchio (1049). Furthermore there were some castles first mentioned after 1050 although were likely built much earlier than that date. These include Vezzano (1052), Castel Castagnaio (1063), Fronzola & Gello (1065), Bibbiena (1114), Chiusi (1119), Poppi (1191)[358] and Romena (1164). Phase two was a later layer of castles which were built after 1050 through the affirmation of a local elite, often as fees from the Bishop of Arezzo. These include Gressa (1078), Soci (1079), Ragginopoli (1081), Partina & Lierna (1095), Papiano (1091), Moggiona (1107), Teggiano & Lorenzano (1111) and Serra & Riosecco (1114).[359]

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[354] *Idem*, nos 46, 546, 583, 593, 612, 606, 609, 612, 616.

[355] *Idem,* nos 16, 27, 183, 204, 461, 402.

[356] *Idem*, nos 60, 90 & 82, 118.

[357] C. Molducci, 'L'incastellamento dei conti Guidi nel Valdarno superiore fra X e XII secolo', in G. Vannini (ed.), *Rocca Ricciarda, dai Guidi ai Ricasoli. Storia e archeologia di un castrum medievale nel Pratomagno aretino* (Florence, 2009), 53-69; R. Bargiacchi, 'I castelli dei conti Guidi in Casentino: storia di un contesto archeologico', in F. Canaccini (ed.), *La lunga storia di un stirpe comitale: i conti Guidi tra Romagna e Toscana* (Florence, 2009), 211-44.

[358] R. Bargiacchi, 'I conti Guidi e l'incastellamento del Casentino: il caso di Poppi', *Archeologia Medievale*, 35 (2008), 255-73.

[359] Adapted from G.A.S., 'Incastellamento e pievanie in Casentino nei secoli XI e XII', <http://www.casentinoarcheologia.org/AIC/pieviecastelli1.html>, (2006). See also M. Cortese,

The *castelli* in the Casentino emerged as an expression of social status and political control by capitaneal families looking to distinguish themselves as aristocrats from mere freemen. Indeed, there was no wall between the social strata – freemen could aspire to aristocratic status through their actions. Yet the problem was that local power was still linked to landholding. Due to fragmented landownership networks, these founders of *castelli* actually tended to have only partial control over them. Thus the castle in the Casentino may have been a political symbol, and it was more often than not an isolated aristocratic residence; but significantly they were rarely population centres and their demographic effect was negligible.[360] As Wickham concludes "(*castelli*) were simply small additions to a continuing network of dispersed settlement" and "*incastellamento* as a population movement had so far little effect on the zone".[361] The Casentino had numerous lords who did not try to force people into their *castelli*. The castles had a function as a political symbol and an expression of social status, but were not major economic centres shown elsewhere.[362]

B: Late medieval commercialisation and settlement concentration

In the late Middle Ages, this settlement structure changed. In contrast to a largely dispersed settlement pattern between the eleventh and thirteenth centuries, by 1427 around two-thirds of the houses were located in concentrated villages in the Casentino Valley. Through the fifteenth and sixteenth centuries this proportion likely increased to levels closer to 75 percent.[363] In the 1427 *catasto* houses were often recorded as clustered around central *corte* or *piazze*, and often explicitly located inside the castle walls. It appears the fourteen and fifteenth centuries were particularly important for settlement change in the valley. For example Marciano was recorded in a Florentine inspection of Aretine *castelli* in 1385 as having castle walls

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'L'incastellamento nel territorio di Arezzo (secoli X-XII)', in R. Francovich & M. Ginatempo (eds.) *Castelli. Storia e archeologia del potere nella Toscana medievale* (Florence, 2002), 67-109.

[360] For similarities elsewhere see Conti, *La formazione*, i, 109-11.

[361] Wickham, *The mountains and the city*, 269-306, q. 300. Also see C. Wickham, 'Settlement patterns in medieval Italy: (1) nucleation (Monte Amiata in Southern Tuscany); (2) Dispersal (the Casentino in Northern Tuscany)', in A. Mackay (ed.), *Atlas of medieval Europe* (London, 1997), 140-1.

[362] Settia, *Castelli e villaggi*, 258-68; E. Fiumi, *Storia economica e sociale di San Gimignano* (Florence, 1961), 28-111.

[363] For example 44 out of 60 houses in Moggiona in 1574 were inside the castle walls. See ASF, Corporazioni religiose soppresse dal Governo Francese, no. 39.

but only 12 'malcontent' residents.[364] By 1427 it had 35 households which could mean as many as 160 inhabitants. Although this may partially have been down to some level of population increase, more likely it was caused by the restructuring of scattered settlement, as families began to orientate themselves into larger concentrated villages. Perhaps the breakdown of other settlements such as Contra, which became a dispersed assortment of *poderi* leased by the monastery of Camaldoli, prompted owner-cultivators to converge on the villages.

Figure 3.4 Main concentrated villages in the Casentino Valley, 1427

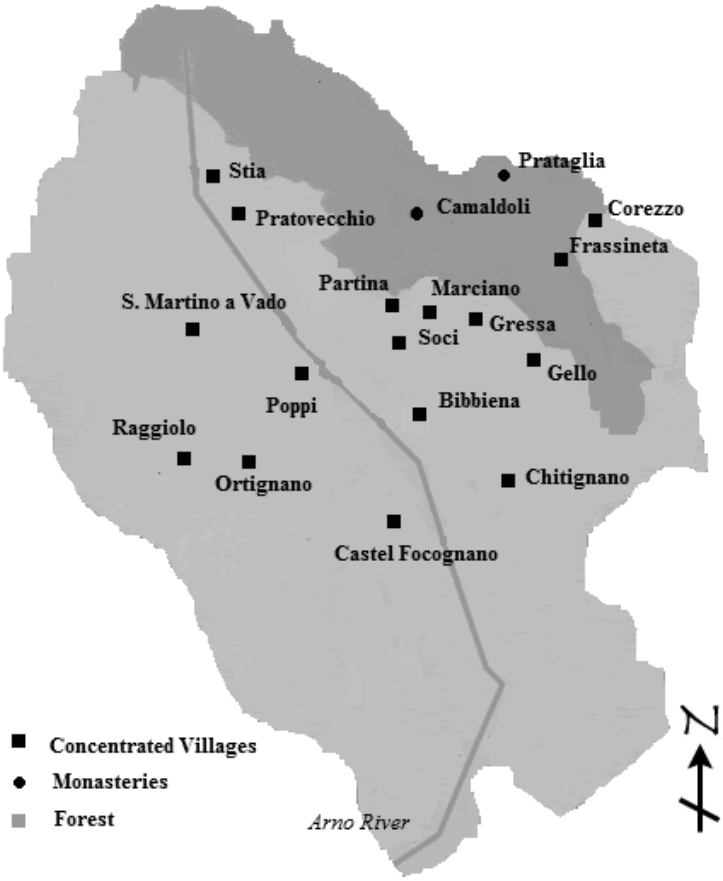

Table 3.1 Concentrated settlements in the Casentino Valley, 1427

No. of houses	1546
No. of huts	308
Concentrated in a castello (%)	27
Houses in a concentrated village (%)	63
Dispersed houses (%)	37

Sources: ASF, Catasto, nos. 179-81, 246, 250, 330.

[364] U. Pasqui (ed.), *Documenti per la storia della città di Arezzo,* iii (Florence 1937), no. 859. The poor state of Marciano may have been down to a series of exceptionally poor harvests. See ASF, Diplomatico, Olivetani d'Arezzo, 8 August 1346.

Through the fifteenth and at least the first half of the sixteenth century these real village concentrations likely became more concentrated and more populous, an argument supported by comparing the population figures from the 1427 *catasto* with a state census from 1552. Although some of the settlements cannot be compared (for example Poppi has population figures for 1552, but did not appear in the *catasto*, while settlements such as Montecchio were recorded in 1427 but received no population figures for 1552), the table below shows a general trend towards the increased size of the villages of the Casentino.

Table 3.2 Population trends in the Casentino, 1427-1552

	Population, 1427	**Population, 1552**	**Index of change (100 = same)**
Pezza	50	39	78
Pratovecchio & Stia	693	865	125
Raggiolo	329	546	167
Banzena	63	187	297
Bibbiena	941	1472	156
Campi	131	301	230
Gello	203	161	79
Giona	36	46	128
Gressa	104	393	378
Marciano	158	161	102
Serravalle	63	264	419
Soci	256	94	37
Partina	122	300	246
Coffia	50	173	346
Ortignano	675	654	97
Romena	153	88	58
Strapetegnoli	54	124	230
Cetica (S. Agnoli)	599	872	146
Cetica (S. Pancrazio)	455	759	167
Garliano	261	538	206
Vado & Castello S. Niccolo	589	236	40
Total	**5985**	**8273**	**138**

Sources: ASF, Catasto, nos. 179-81, 246, 250, 330; BNF, Magliabechi, ii, 120.

Of the villages that comparable data is available for, the population levels in 1552 appear to have been bolstered by more than a third of what they were in 1427.

Not every settlement increased in size, but if anything that supports the hypothesis for a general process of increased concentration in habitation in the Casentino throughout the late Middle Ages. Indeed those settlements in 1427 that were still scattered or small hamlets in 1427 such as Pezza or Gello, became even smaller by the mid sixteenth century, perhaps revealing of a trend of movement away from these sites and into the real concentrated market centres such as Marciano, Pratovecchio or Bibbiena. Settlement in the Casentino probably only started to decline right at the end of the sixteenth century, in the context of a declining pastoral trade and the reappearance of pestilence.[365]

Late medieval concentration of settlement in the Casentino Valley was linked to the close grouping of inhabitants around small market centres and points of production, which was stimulated by increased marketing of diverse products to satisfy increased urban and regional demand. Some of the settlements grew into flourishing small towns such as Poppi, which had grocery shops, bakeries, butchers, druggists, barbers, tailors, and cobblers.[366] In 1427 the Casentino already had an assortment of bakers, barbers, belt-makers, spice-sellers, blacksmiths, innkeepers, leather harness makers, doctors, notaries, millers, merchants, saddlers, shoemakers, soldiers, tailors, weavers, and weapons makers.[367] Fifteen percent of those heads of household listed in the *catasto* were tradesmen although the proportion could have been higher with job plurality; for example, Bartolo Rampino of unknown status lived in Stia and had a shop there, while Antonio Cecco, 'peasant cultivator', had a smith's workshop in Marciano.[368] Houses and shops came to be increasingly huddled around the market centres, and by the late Middle Ages markets or fairs were in existence at Soci, Poppi, Pratovecchio, Stia, Strada, Porciano, Romena, Castel San Niccolò, and Bibbiena.[369]

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[365] See BNF, EB, 15, no. 2; ASF, Strozziane, i, no. 24. For the pestilence in the early seventeenth century see Biblioteca Comunale di Poppi, 'Relazione della peste in Poppi nel 1630 e memorie della più distinte famiglie della stessa città scritta da Bernardo di Giuliano Lapini nel XVII secolo', no. 160. The only signs of economic decline in the Casentino come at the end of the sixteenth century, for example see some of the temporary outward migration in search of work to the Maremma in ASF, Pratica segreta, no. 174, fo. 1, no. 178, fos 5-6.

[366] ASF, Decima granducale, no. 6852, fos 1-21v.

[367] From my database of ASF, Catasto, nos 179-81, 246, 250, 330.

[368] ASF, Catasto, no. 179, fos 417, 471.

[369] For early evidence of markets see RC, i, nos 559-60, 705, ii, no. 1063. Later markets and fairs see ASF, Reale Arcispedale di Santa Maria Nuova, no. 474, fos 27r, 105r, no. 475, fos 86v, 78v-79r. Some of the market centres with a distinctive triangular design have been dated by archaeologists to the fourteenth century such as Pratovecchio and Stia in G. Cherubini & R. Francovich, 'Forme e vicende degli insediamenti nella campagna Toscana dei secoli XIII-XV', *Quaderni Storici*, 24 (1973), 875.

3.4 Divergent settlement development and rural fortunes during the late Middle Ages: why?

The growth of Florence into a dominant city-state by 1300 had a great impact on the Tuscan countryside, but as suggested above, the effects were by no means homogenous. Why did the *contado* suffer from settlement contraction, abandonment, and outward migration towards the city, while other areas of Tuscany (such as the Casentino Valley), were able to withstand Florentine exploitative tendencies, and furthermore, even benefited from heightened urban demand for rural produce? In this section it is suggested that those pre-industrial societies which were best equipped to fend off urban exploitation were made up of a number of favourable constellations, which were essentially egalitarian and flexible. Those pre-industrial societies unable to fight off urban exploitation (such as the *contado*) were made up of a number of distorted constellations, which were essentially polarised and difficult to shift. These constellations are addressed in turn as (i) property distribution, transfer, and access (ii) modes of exploitation, (iii) economic portfolios, (iv) power balances.

A: Property distribution and transfer

From the fourteenth century onwards, wealthy Florentine burghers purchased large portions of land in the *contado*.[370] Landownership in the countryside was one way urbanites could diversify their commercial portfolio,[371] become more self-sufficient in food production,[372] and even assert a certain social prestige, as evidenced by the construction of residential villas in the second half of the

[370] See, for example, G. Pinto, *La Toscana nel tardo Medioevo: ambiente, economica rurale, società* (Florence, 1982); G. Cherubini, *L'Italia rurale del basso medioevo* (Rome, 1984).

[371] R. Emigh, *The undevelopment of capitalism: sectors and markets in fifteenth-century Tuscany* (Philadelphia, 2009), 128; R. Goldthwaite, *The building of Renaissance Florence* (Baltimore, 1980), 49-50.

[372] G. Pinto, 'Coltura e produzione dei cereali in Toscana nei secoli XIII-XV', in *Civiltà ed economia agricola in Toscana dei secoli XIII-XV: problemi della vita delle campagne nel tardo medioevo* (Pistoia, 1981), 283; L. Kotel'nikova, 'Artigiani-affittuari nelle città e nelle campagne toscane del XV-XVI Secolo', in *Aspetti della vita economica medievale* (Florence, 1985), 747-58.

fifteenth century.[373] Thus social distribution of land in the late medieval *contado* became increasingly polarised. By the time of the *catasto* in 1427, only 18 percent of the land in the *contado* was owned by rural inhabitants, declining to 14 percent by the end of the fifteenth century.[374] Taxable wealth (land, animals, surplus) in the *contado* was distributed highly unequally with a Gini-index of 0.80.[375] In some parishes such as Montecalvi, none of the rural households owned any land whatsoever.[376] In the town and territory of San Gimignano in 1332, over four-fifths of the inhabitants were described as poor or propertyless.[377] Futhermore, over 60 percent of the landowners there were townspeople.[378]

Furthermore, scholars are generally of the position that Tuscan peasants were barely influenced by communal management of fields and grazing, cultivating their plots as and when they chose.[379] There is no sign of common land ever being important on the eastern plains of Lucca, adjoining the Florentine *contado*.[380] Of the minimal common lands that had existed prior to 1300, the increased urban encroachment upon land in the *contado* reduced common land to almost nothing during the fourteenth and fifteenth centuries.[381] This was not a phenomenon exclusive to the Florentine *contado*, because Sienese burghers had expropriated

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[373] A. Lillie, *Florentine villas in the fifteenth century: an architectural and social history* (New York, 2005), 23-38; G. Gobbi Sica, *The Florentine villa: architecture, history, society* (Abingdon, 2007), 326. Scholars have suggested the noble lifestyle exhibited by the nouveaux riche in late-medieval Tuscany damaged commerce, for example, in G. Pinto, 'Honour and profit: landed property and trade in medieval Siena', in T. Dean & C. Wickham (eds.), *City and countryside in late medieval and Renaissance Italy: essays presented to Phillip Jones*, (London, 1990), 85.

[374] Conti, *La formazione*, ii, 97-102, 395-411.

[375] Taken from my own calculations using the database in D. Herlihy & C. Klapisch-Zuber, *Census and property survey of Florentine domains and the city of Verona in the fifteenth century* (Cambridge MA, 1981). For clarification, a figure of 0 on the Gini-index would represent a totally equal society (wealth distributed evenly between all the landholders) while 100 would represent a totally inequitable society (wealth consolidated in the hands of one interest group).

[376] van Bavel, 'Markets for land', 513

[377] D. Balestracci, 'Lavoro e povertà in Toscana alla fine del medioevo', *Studi Storici*, 23 (1982), 567.

[378] Fiumi, *San Gimignano*, 140.

[379] Wickham, 'Land sales and land market', 260.

[380] C. Wickham, *Community and clientele in twelfth-century Tuscany: the origins of the rural commune in the plain of Lucca* (Oxford, 1998), chps 1-2.

[381] D. Balestracci (ed.), *The Renaissance in the fields: family memoirs of a fifteenth-century Tuscan peasant*, trans. P. Squatriti & B. Merideth (University Park PA, 1999), 14-5.

much of the commons around Siena by 1500, while rural communes further north in Lombardy had to sell off its communal pastures in order to settle debts.[382]

The rural inhabitants of the *contado* were in no position to stem the tide of urban acquisition of property in the countryside. Pestilence and diseases of the fourteenth century in many parts of Western Europe brought about new freedoms and opportunities for the rural peasantries that survived.[383] Not so for the people of the Florentine *contado* however, who through a series of plagues and poor harvests, lost their lands to new urban landlords. Rural inhabitants of the *contado* also had very weak security on their property, particularly since the urban courts tended to side with urban landowners and speculators.[384] Neither did the villagers have the wealth to call upon legal aid to support their claims.[385] Even ecclesiastical institutions tended to accumulate property in the *contado* at the expense of local peasants, as seen in a number of angry disputes between the monastery of Settimo and the people of S. Martino la Palma.[386]

The situation in the *distretto* was different. While Florentine jurisdiction increasingly extended out into the distant mountains by the fifteenth century, urban landownership did not follow suit. Samuel Cohn working on a large number of notarial charters to trace the workings of the Florentine land market, found almost no mention of urban landownership in Appennines to the east and north.[387] In fact much of the land in the *distretto* remained in the hands of rural inhabitants throughout the late Middle Ages.[388] In the Casentino over half of the households recorded in 1427 were local cultivators who owned their own land (scattered plots), and over three-quarters of the population lived in their own houses.[389] Approximately 35 percent of the land was in the hands of ecclesiastical institutions, the monastery of Camaldoli being one of the largest landowners in the region.[390] Forty-five percent of

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[382] A. Isaacs, 'Le campagne senesi fra Quattro e Cinquecento: regime fondiario e governo signorile', in G. Giorgetti (ed.), *Contadini e proprietari nella Toscana moderna*, i (Florence, 1979), 377-403; Menant, *Campagnes lombardes du moyen age*, 546.

[383] See for example, C. Dyer, *An age of transition?*; 'The ineffectiveness of lordship'; Bois, *Crise du féodalisme*; Hilton, 'A crisis of feudalism?', 8-10; Genicot, 'Crisis: from the Middle Ages to modern times'.

[384] van Bavel, 'Markets for land', 507-8.

[385] D. Osheim, 'Countrymen and the law in late-medieval Tuscany', *Speculum*, 64 (1989), 317-37.

[386] C. de la Roncière, 'A monastic clientele? The abbey of Settimo and, its neighbours and its tenants (Tuscany, 1280-1340)', in Dean & Wickham (eds.), *City and countryside*, 62.

[387] Cohn, *Creating the Florentine state*, 22-4.

[388] S. Epstein, 'The peasantries of Italy', in Scott (ed.), *The peasantries of Europe*, 89.

[389] ASF, Catasto, nos 179-81, 246, 250, 330.

[390] *Idem*, no. 191, fo. 235v.

the land belonged to either local tradesmen or peasant farmers, 15 percent belonged to rural nobles, while only a very tiny remainder was in the hands of urbanites (and these were mainly Aretine, not Florentine). The peasant-owner property structure of the Tuscan mountains remained stable well into the early modern period. For example in the mountain village of Moggiona in 1576, less than 1 hectare out of a total 323 belonged to a Florentine owner.[391] High peasant property-ownership was not solely characteristic of the Casentino Valley either, for in other parts of the *distretto* smallholders held as much as 85 percent of the land.[392]

It is difficult to discern whether the lack of Florentine accumulation of land in the *distretto* was down to a lack of incentive or a general inability. However, there were more barriers to land polarisation in the mountains than exhibited in the *contado*. A basic issue may have just been distance: land acquired in the mountainous *distretto* was simply too far to be able to administer easily. An argument purely on distance is dubious however, when one considers that the area around Pisa became dominated by Florentine landowners looking to exploit the fertile plains for grain production and to control trade through the coastal ports.[393] Pisa was further away from Florence than, for example, the Casentino. Furthermore, it has been shown that transportation costs between the Casentino and Florence were not prohibitively high, for account books suggest the costs of bringing 100 pounds of wool from Poppi to Florence was just four percent of the cost of the wool.[394] In that case the lack of incentive for urban land acquisition in the *distretto* may have had something to do with the poor fertility of the soils. The climate and soils supported a wide range of crops in the eastern mountains, although not high yields in anything.[395]

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[391] ASF, Corporazioni religiose soppresse dal Governo Francese, no. 39, fo. 172.

[392] G. Cherubini et al., 'La proprietà fondiaria in alcune zone del territorio senese all'inizio del Trecento', *Rivista di Storia dell'Agricoltura*, 14 (1974), 2-176. Also high peasant landholding recorded at, for example, Val di Cecina and the Valdarno in ASF, Catasto, nos 116-7, 886.

[393] See S. Epstein, 'Market structures', in Connell & Zorzi (eds.), *Florentine Tuscany*, 94; G. Chittolini & E. Fasano Guarini, 'Citta soggette e contadi nel dominio fiorentino tra Quattro e Cinquecento: il caso pisano', in M. Mirri (ed.), *Ricerche di storia moderna*, i (Pisa, 1976), 1-94; M. Mallett, 'Pisa and Florence in the fifteenth century: aspects of the period of the first Florentine domination', in Rubinstein (ed.), *Florentine studies*, 432. Pisan country folk strongly opposed Florentine encroachment, as described in M. Luzzati, 'I contadini e la guerra di Pisa (1494-1509): nuovi dati sulla base dei registri battesimali', in R. Pozzi & A. Prosperi (eds.), *Studi in onore di Armando Saitta dei suoi allievi pisani* (Pisa, 1989), 11-22.

[394] J. Brown, 'The 'economic decline' of Tuscany: the role of the rural economy', in C. Smyth & G. Garfagnini (eds.), *Florence and Milan: comparisons and relations* (Florence, 1989), 110.

[395] Modern statistics suggest very low yields in most crops but it is always dangerous to equate modern soils with medieval ones. See G. Biagoli, *L'agricoltura e la populazione in Toscana all'inizio*

Furthermore the heavy clays and steep slopes were unsuited for medieval cultivation techniques.[396] Probably more important, however, was that the amount of cultivable land in the northern and eastern mountains of Tuscany was much smaller than in the plains and hills closer to Florence. The valleys and slopes were often densely covered in ancient forests, and if any prospective Florentine burgher had hopes of constructing a series of sharecropping farms this far out, there was a good chance they would first have to chop a lot of trees down. In other areas of northern Italy such as the Po Valley, cities and towns offered favourable concessions to new colonists to drain marshes and cut down trees for arable and vineyards, but given the demographic downturn in the Florentine *contado*, it is difficult to see where Florentine landlords could have mobilised manpower for this task.[397]

Furthermore, it was not just the physical task of cutting down trees which dissuaded potential Florentine investors and landowners: many of the forests in the *distretto* were protected by highly valued common rights. Such was the reliance on woodland that hardly any attempt was made to cut down trees for arable or settlement. In the Casentino Valley in 1279, even the Prior of Camaldoli was forbidden to cut wood to repair houses of the hermitage without first consulting the wider monastic community.[398] These sorts of restrictions were still well in use some 300 years later, as a series of charters between 1563 and 1575 strictly forbade the monks of Camaldoli to cut down trees in the forest without first consulting the local communities and the monastery.[399] The increasing use of charters in the late Middle Ages to regulate pastoral resources in a more formalised manner has been noted for other mountain regions of Italy.[400]

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dell'Ottocento (Pisa, 1975), 184; G. Barbieri, *Memoria illustrativa della carta della utilizzazione del suolo della Toscana* (Roma, 1966), 24.

[396] For the difficulties associated with mountain agriculture see F. Fischler, 'Die Berglandwirtschaft im europäischen Agrarmodell', *Der Almund Bergbauer*, 11 (2002), 3; P. Viazzo, *Upland communities. Environment, population and social structure in the Alps since the sixteenth century* (Cambridge, 1989), 18.

[397] For the Po Valley, see Castegnetti, 'Primi aspetti di politica annonaria; Campanini (ed.), *I rubricari degli statuti comunali di Reggio Emilia*, 31-58; Cerlini (ed.), *Consuetudini e Statuti reggiani*. Also for Umbria, see P. Pirillo, 'Borghi e terre nuovi dell'Italia centrale', in R. Comba & A. Settia (eds.), *I borghi nuovi, secoli XII-XIV* (Cuneo, 1993), 86.

[398] G. Mittarelli & A. Costadoni (eds.), *Annales Camaldulenses ordinis S. Benedicti*, vi (Venice, 1773), no. 242.

[399] ACC, Atti Capitolari, no. 156, fos 3r, 5r, 14v, 18r-19r, 21r, 25v, 36r, 43r, 45r-50r, 54r-60r, 68r-69r, 76r, 84r-87r, 95r.

[400] M. Casari, 'Emergence of endogenous legal institutions: property rights and community governance in the Italian Alps', *Journal of Economic History*, 67 (2007), 191-225.

Grazing rights in the mountains also were rigorously guarded, as seen for the mountain community of Raggiolo in the sixteenth century, where a cap of 2000 was put on the number of animals that could pasture in the forests of the commune.[401] Also one area of the forest was marked out as 'banned' and a charge was levelled on any unwanted animals found there, while an area known as the '*pastura di Prata*' in 1545 was reserved only for animals belonging to Raggiolo villagers.[402] The forested slopes around Pratovecchio became a contested space, serving as a meeting place for the people of Raggiolo, Carda, Calletta, Cetica and Garliano to discuss their grazing arrangements and the boundaries involved.[403] In a mountain area further north of the Casentino, on the Tuscany-Romagna border, the aristocratic Alberti family had to resolve a point of contention between two communities (Baragazza and Castiglione) over the territorial boundaries of the commons.[404] The importance and stability of common resources in areas of the distretto may have provided further difficulties for Florentine land acquisition. Villages and institutions clung on tightly to their highly guarded communal rights over pastures and forests, preventing both sales to private parties and assarting of new land.[405]

B: Modes of exploitation

The problems in the *contado* in the late Middle Ages were exacerbated by malfunctioning factor markets (in labour, credit, capital), which contributed to the emergence of the onerous sharecropping regime. As mentioned earlier, plague and fiscal repression caused a contraction in settlement and promoted rural-urban migration. In Western Europe, a reduction in population (as what happened after the Black Death) often provided benefits to rural communities, for example, in heightened geographical mobility, more work to go round, and higher wages. In the Florentine *contado* this was not the case, and the reduction in inhabitants actually worked against those who stayed or survived. Serfdom had almost disappeared by the thirteenth century in this part of Tuscany (as in many parts of northern and central

[401] For the management of the commons of Raggiolo, see ASF, Notarile Antecosimiano, nos 9495-7.

[402] ASF, Statuti delle comunità autonome e soggette, no. 696, fos 49r-50v, 18v, 34v.

[403] M. Bicchierai, *Una comunità rurale toscana di antico regime: Raggiolo in Casentino* (Florence, 2006), 86-7.

[404] M. Abatantuono & L. Righetti, *I conti Alberti (secoli XI-XIV). Strategie di una signoria territoriale. La montagna tra Bologna e Prato* (Rastigano, 2000), 232-3.

[405] Perhaps also holding a cultural or spiritual affinity with the woodlands as suggested in C. Borghi, 'Uomo, albero, foresta: frammenti di cultura tradizionale', in Zagnoni (ed.), *Comunità*, 139-54.

Italy) so urban landlords could not invoke extra-economic coercion,[406] and the demographic depression in the *contado* prevented the emergence of large lease farms (of the sort seen in Lombardy)[407] due to the lack of a ready pool of wage labour. Consequently, urban landlords rearranged their lands into compact farms (*poderi*) and forced households to work on them in sharecropping contracts (*mezzadria*).[408] Occasionally, *poderi* were leased on fixed-terms to rural 'middlemen', who then re-leased the farms on sharecropping contracts to peasant families.[409] *Poderi* and sharecropping was not just a phenomenon in the Florentine *contado*, but appeared in the hinterlands of towns and cities across Marche, Umbria and Emilia.[410] These farms included all the buildings needed to run the enterprise; huts, barns, furnaces, stables, dovecotes, wells, and cellars.[411] *Poderi* were not always entirely new constructions however; many were simply adapted pre-existing *curtes*, demesnes, or even *castelli*.[412]

The lack of labour made sharecropping the obvious solution for urban landlords who wanted a supply of food in order to be more self-sufficient, did not want to be involved in the direct demands of farming, and did not want to be too concerned with supervision.[413] The rural inhabitants of the *contado*, lacking both capital and access to credit, had to accept their fate as sharecroppers. Indeed, credit

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[406] For a good account of this process, see P. Jones, 'From manor to mezzadria: a Tuscan case study in the medieval origins of agrarian society', in Rubinstein (ed.), *Florentine studies*, 211-4. See the thirteenth-century Florentine legislation against serfdom in one village community in ASF, Provvisioni, no. 4, fo. 78.

[407] Chittolini, 'Alle origini delle 'grandi aziende' della bassa lombardia'.

[408] A massive literature of which the best is probably C. Klapisch-Zuber, 'Mezzadria e insediamenti rurali alla fine del medio evo', in *Civiltà ed economia agricola in Toscana*, 149-64; G. Cherubini, 'Qualche considerazione sulle campagne dell'Italia centro-settentrionale tra l'XI e il XV Secolo (in margine alle recherché di Elio Conti)', *Revista Storia Italiana*, 79 (1967), 111-57; Pinto, *La Toscana*, 161-2.

[409] See R. Emigh, 'The mystery of the missing middle-tenants: the 'negative' case of fixed-term leasing and agricultural investment in fifteenth-century Tuscany', *Theory & Society*, 27.3 (1998), 351-75.

[410] Epstein, 'Peasantries', 91.

[411] R. Stopani, *Medievali 'Case da Lavoratore' nella campagna fiorentina* (Florence, 1978), 19; R. Biasutti, *Casa rurale nella Toscana* (Bologna, 1938), 14.

[412] As suggested in R. Comba, 'La dispersione dell'habitat nell'Italia centro-settentrionale tra XII e XV secolo. Vent'anni di ricerche', *Studi Storici*, 25 (1984), 765-83; 'Le origini medievali dell'assetto insediativo moderno nelle campagne italiane', in *Storia d'Italia: annali*, viii (Turin, 1985), 386; Jones, 'From manor to mezzadria', 228.

[413] See the debate between two well-known scholars in S. Epstein, 'Tuscans and their farms', *Rivista di Storia Economica*, 11 (1994), 111-23; 'Moral hazard and risk sharing in late medieval Tuscany', *Rivista di Storia Economica*, 11 (1994), 131-7; F. Galassi, 'Tuscans and their farms: the economics of share tenancy in fifteenth-century Florence', *Rivista di Storia Economica*, 9 (1992), 77-94.

markets in the *contado* were local and isolated, forcing peasants to contract debts with their landlords, increasing their susceptibility to expropriation.[414] Florentine administration backed this up with oppressive legislation, freezing wages, setting high food prices, and blocking labour movement.[415] The tenant households working the sharecropping farms faced a number of imposed restrictions – tenants could even be jailed for speaking disrespectfully to their landlords.[416] Urban landlords matched up the sizes of the farms in good accordance with the size of families.[417] Sharecropping families were prohibited from movement and performing work outside the farm,[418] and furthermore there were stipulations made on the types of crops cultivated (with emphasis on labour intensive viti-culture or olive-growing), dates of sowing and harvesting, and the length of ditches to be dug.[419] It was even the duty of some of the tenant families to physically carry the portion of produce destined for the urban landlords to Florence.[420] What characterised the modes of exploitation in the *contado* was the complete lack of flexibility and choice.

Sharecropping was not unknown in the *distretto*, particularly in the fifteenth century, although it was not the dominant mode of exploitation as in the *contado*. Large ecclesiastical institutions such as the monastery of Camaldoli did create a series of *poderi*, essentially sub-divided former granges and *curtes*, although these were usually leased out on fixed terms (usually three years) and rents were fixed pre-agreed amounts rather than percentages of surplus.[421] In 1427 the monastery of

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[414] On the lack of credit, see R. Hopcroft & R. Emigh, 'Divergent paths of agrarian change. Eastern England and Tuscany compared', *Journal of European Economic History*, 29 (2000), 15-6; M. Botticini, 'A tale of benevolent governments: private credit markets, public finance, and the role of Jewish lenders in medieval and Renaissance Italy', *Journal of Economic History*, 60 (2000), 170; Zuijderduijn, *Medieval capital markets*, 242-6. On the link between lack of credit and sharecropping see D. Ackerberg & M. Botticini, 'The choice of agrarian contracts in early Renaissance Tuscany: risk sharing, moral hazard or capital market imperfections?', *Explorations in Economic History*, 37 (2000), 242. On personal bonds and risks of expropriation, see Emigh, 'Loans and livestock', 714.

[415] van Bavel, 'Markets for land', 524.

[416] F. McArdle, *Altopascio: a study in Tuscan rural society, 1587-1784* (Cambridge, 1978), 167.

[417] R. Emigh, 'Labor use and landlord control: sharecroppers' household structure in fifteenth-century Tuscany', *Journal of Historical Sociology*, 11 (1998), 37-73.

[418] Herlihy & Klapisch-Zuber, *Tuscans*, 50; Jones, 'Manor to mezzadria', 223.

[419] G. Piccinni, 'Le donne nella mezzadria Toscana delle origini. Materiali per la definizione del ruolo femminile nelle campagne', *Ricerche Storiche*, 15.1 (1985), 152; G. Pinto, 'Forme di conduzione e rendita fondiaria nel contado fiorentino (Secoli XIV e XV): le terre dell'Ospedale di San Gallo', in E. Sestan (ed.), *Studi di storia medievale e moderna* (Florence, 1980), 300-6.

[420] Jones, 'Florentine families', 195.

[421] ASF, Camaldoli, nos 117-8, 136, 183, 589, 935; ASF, Corporazioni religiose soppresse dal Governo Francese, no. 39, fo. 7r.

Camaldoli was a strong community of around 300 monks and lay brothers, and so it made sense to adapt the rents from the *poderi* to whatever the monastery needed the most.[422] In the fifteenth and sixteenth centuries, tenants paid in combinations of cash, piles of wood, grain, legumes, eggs, bread, chickens, beans, oil, pork, and even a few days labour on the monastery's demesnes.[423] In complete contrast to the declining rents shown by David Herlihy on the *poderi* of Impruneta in the *contado* (landlords lowered the amounts to attract tenants), the rents on the Casentinese *poderi* increased between the middle of the fourteenth and the end of the fifteenth century, indicative of a buoyant economy and population. For example, the Castaldo Benedenti for the 'Podere Cutrino' at Monte paid Camaldoli a rent of 110 staia of grains and 25 staia from his vineyards and orchards in 1349 but in 1481 the rent was 188 staia of grains, 300 pounds of pork, two chickens, a pair of capons, 200 eggs and one cell of wood.[424] The number of *poderi* also increased substantially; Camaldoli had just six documented in 1328 but over 30 by the onset of the sixteenth century. Using this system, the monastery of Camaldoli went from strength to strength in the late Middle Ages, curious given the general decline in monasteries in central Italy at this time.[425] Camaldoli sold off land during hard times, but this was more a policy of efficient economic organisation rather than true bouts of crisis: giving up distant peripheral lands at Borsemulo in 1319, where profits were insufficient to make it worthwhile.[426] More frequently, the monastery leased out distant lands, for example in Romagna.[427] Camaldoli thrived while its Benedictine neighbours towards Arezzo, S. Fiora, was reduced to a handful of monks in the late thirteenth century, caught in a culture of debt and owing money to Aretine banks and citizens of Florence.[428]

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[422] ASF, Camaldoli, no. 191, fo. 255v.

[423] See also P. Jones, 'A Tuscan monastic lordship in the later Middle Ages: Camaldoli', *Journal of Ecclesiastical History*, 5.2 (1954), 168-83.

[424] ASF Camaldoli, no. 117, fo. 123; no. 136, fo. 4.

[425] On monastic decline see C. Cipolla, 'Une crise ignorée: comment s'est perdue la propriété ecclésiastique dans l'italie du nord entre le XIe et le XVIe siècle', *Annales: ESC*, 2 (1947), 317-27; D. Herlihy, 'Church property on the European continent 701-1200', *Speculum*, 36 (1961), 98. Debated in G. Chittolini, 'Un problema aperto: le crisi della proprietà ecclesiastica fra Quattro e Cinquecento', *Rivista Storica Italiana*, 85 (1973), 235-92; E. Stumpo, 'Problema di ricerca: per la storia della crisi della proprietà ecclesiastica fra Quattro e Cinquecento', *Critica Storica*, 1 (1976), 62-80.

[426] Mittarelli et al. (eds.), *Annales,* ix, no. 271.

[427] ASF Camaldoli, no. 590, fos 53, 56v, 137v, 138v.

[428] See P. Grossi, *Le abbazie benedettine nell'alto medioevo italiano* (Florence, 1957), 114-25; G. Penco, *Storia del monachesimo in Italia* (Rome, 1961), 430. Also ASA, S. Fiora, no. 704; Pasqui (ed.), *Arezzo*, ii, no. 481.

What was most striking about modes of exploitation in the Casentino Valley in contrast to the *contado,* was the great variety and flexibility in the tenurial structures present. The mountain regions of Tuscany have generally been painted as rather 'backward' and conservative places; little 'feudal enclaves' where manors and serfdom lingered on well into sixteenth century, under the influence of ecclesiastical institutions or lay aristocratic families such as the Guidi or Ubertini.[429] Such a picture is only half true. Demesne agriculture did continue in some places all the way into the sixteenth century, such as at the mountain village of Moggiona where customary labour works were performed.[430] However, these demesnes did not resemble anything like the classic bi-partite estates seen in northern Europe during the high Middle Ages.[431] Most of the demesnes in the Tuscan *distretto* were small, customary labour was not particularly onerous, and *corvées* were more symbolic than having any economic significance.[432] Actually between the fourteenth and sixteenth centuries in the eastern mountains of Tuscany, there were a great variety in tenurial forms, some fixed ancient rents based more on custom and fidelity, alongside newer tenancies more linked to the market value of the land and paid in cash or kind.[433] Indicative of this flexibility in modes of exploitation was the constant and rapid switching between direct and indirect agricultural management. For example, one *podere* in the mountain village of Monte was worked by a former *castaldo* (lay brother) as a tenant in 1328, in 1332 it returned back to the monks of the hermitage at Camaldoli, and then in 1334 it once again was worked by the same tenant, the former *castaldo* Benuccio.[434]

In mountain areas such as the Casentino Valley, the diverse tenurial structure meant local people could be fixed lease tenants or (less frequently) sharecroppers on *poderi*, they could cultivate their own lands, exploit the common woodlands and

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[429] For example see, E. Baldari & S. Farina, 'Il Casentino. Una vallata montana dalleo sfruttamento feudale all'annessione al contado urbano', in E. Guidoni (ed.), *Città, contado e feudi nell'urbanistica medievale* (Rome, 1974), 64-99.

[430] ASF, Camaldoli, no. 183, fo. 13.

[431] G. Cherubini, 'Aspetti della proprietà fondiaria nell'aretino durante il XIII secolo', *ASI*, 121 (1963), 5. For the ill-formed manorial economy, see in particular, Jones, *The Italian city-state*, 72-4.

[432] For extent of demesne between 1000 and 1250, see RC, i, nos 50, 106, 153, 170, 266, 376, 503, 535, ii, no. 713, iii, no. 1231; Pasqui (ed.) *Arezzo*, i, no. 169; Manaresi (ed.), *I placiti del 'regnum Italiae'*, i, 373. For the light obligations see an inventory in RC, ii, nos 724, 750. For symbolism of labour works, see P. Jones, 'An Italian estate, 900-1200', *Economic History Review*, 7 (1954), 30.

[433] Increasingly in kind from the thirteenth century onwards in Tuscany. See L. Kotel'nikova, 'Rendita in natura e rendita in denaro nell'Italia medievale', in R. Romano (ed.), *Storia d'Italia*, vi (Turin, 1983), 93-112.

[434] ASF, Camaldoli, no. 117, fos. 123-43.

pastures, or work as wage labourers or as customary tenants on demesnes. Increasingly in the *contado*, the options were sharecropping, migration, or hunger.

C: Economic portfolios

Paolo Malanima suggested the limited number of economic activities (for example a lack of proto-industries) in the *contado* was explained by the fact that *mezzadria* and proto-industry were incompatible.[435] Judith Brown refined this argument slightly by suggesting instead that it was the precise combination of mixed cropping on labour intensive activities such as viti-culture that simply left no time for industrial side-projects.[436] As Brown also remarked however, the lack of economic diversity probably was sown before the dissemination of *mezzadria*, in the general demographic crisis of the fourteenth century. Urban investors and landlords saw no reason to set up rural industries in the *contado* because of the absence of a ready labour pool, made worse by the fact that landlords simply adapted the sizes of their farms to whatever household structure and availability of labour was present.[437] There was simply no incentive for rural craft occupations and industries to develop in the *contado*, which had a circular effect in stimulating further demographic and settlement contraction. Those rural inhabitants who did not fit into a sharecropping family or were unsuccessful sharecroppers had little choice but to migrate to the city.

In some of the mountain regions outside of the *contado*, the situation was completely different. Even before 1300, inhabitants and institutions of the Casentino Valley followed quite diverse economic portfolios, based mainly around a subsistence economy.[438] Peasants practiced a mixed pattern of cultivation and small-scale silvo-pastoral farming, some cheese and wine was produced, and mountain dwellers were particularly reliant on the consumption of chestnuts, which were high in protein.[439] The growth of Florence during the thirteenth century and its increased contact with the *distretto* during the fourteenth and fifteenth centuries only served to widen the

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[435] Malanima, *La decadenza*, 66, 88.

[436] Brown, 'The 'economic decline' of Tuscany', 110-1.

[437] van Bavel, 'Markets for land', 523.

[438] See Wickham, *The mountains and the city*.

[439] The chestnut was a key food resource across most of the Appennines. Cherubini, 'La 'civiltà' del castagno'; Andreolli, 'Formule di pertinenza e paesaggio'; R. Zagnoni, 'La coltivazione del castagno nella montagna fra Bologna e Pistoia nei secoli XI-XIII', in G. Pinto (ed.), *Villaggi, boschi e campi dell'Appennino* (Pistoia, 1997), 41-57. Small wooden huts appeared in the forest for storage of chestnuts. O. Balducci, 'La dimora silvo-pastorale appenninica', in G. Barbieri & L. Gambi (eds.), *La casa rurale in Italia* (Florence, 1970), 305-6.

range of economic activities performed in the region – though individual households themselves became more specialised in their production.[440] Certainly from 1300 onwards (and perhaps beginning sometime in the 1200s), a wide range of products and goods were being sold in concentrated villages crystallising around local market centres, catering for the rise in Florentine demand (particularly since Florence could not get certain products from its *contado*, given the limitations discussed above).

Pastoral farming, in particular, became more commercially-orientated in the late Middle Ages.[441] The suggestion this may have begun as early as the thirteenth century is indicated by the existence of some extremely large flocks: in 1239 in the eastern mountains, the Gualdrada family inherited 4600 sheep, cattle, and goats, after the assets of the aristocratic Guidi family had been subdivided.[442] Through fourteenth and fifteenth centuries, the Casentino Valley became so renowned for larger-scale pasturing that people from outside the area began to periodically graze their animals there too.[443] In 1419, one Florentine put 600 sheep on Camaldoli's pastures, in that year narrowly more than the monastery itself.[444] These rights of grazing came at a great cost, since Camaldoli charged high cash rents for such privileges. In the same valley, over half of the inhabitants had access to animals, and a third had sheep, cattle or both.[445] For every five plots of arable recorded in the *catasto*, there were four plots of either pasture or woodland: an extremely high ratio of cultivated to grazing land.[446] In some places there were even more pasture and woodland plots than arable, for example double in the higher areas of Raggiolo and

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[440] A number of different mountain activities are described in G. Cherubini, 'Risorse, paesaggio et utilizzazione agricola del territorio della Toscana sud- occidentale nei secc. XIV-XV', in *Civiltà ed economia agricola,* 91-115; 'Paesaggio agrario, insediamenti e attività silvo-pastorali sulla montagna tosco-romagnola alla fine del medioevo', in S. Anselmi (ed.), *La montagna fra Toscana e Marche* (Milan, 1984), 58-92; 'La società dell'Appennino settentrionale (secoli XIII-XV)', in *Signori, contadini, borghesi: ricerche sulla società italiana del basso medioevo* (Florence, 1974), esp. 130-1; *Una comunità dell'Appennino dal XIII al XV secolo: Montecoronaro dalla signoria dell'abbazia del Trivio al Dominio di Firenze* (Florence, 1972); 'La società dell'Appennino settentrionale (sec. 13-15)', *Modena*, 6 (1972), 23-36.

[441] In contrast to the view that pastoral farming was a 'traditional subsistence economy' in the eastern mountains argued in Herlihy & Klapisch-Zuber, *Tuscans*, 121.

[442] R. Davidsohn, *Storia di Firenze*, i (Florence, 1956), 1157.

[443] N. Pounds, *An historical geography of Europe, 450BC-AD1330* (Cambridge, 1973), 383-4.

[444] Jones, 'A Tuscan monastic lordship', 180.

[445] Database compiled from ASF, Catasto, nos 179-81, 246, 250, 330. Sheep and cattle are more associated with commercialised pastoral farming than pigs. See C. Wickham, 'Pastoralism and underdevelopment in the early Middle Ages', *Settimane di Studio*, 31 (1985), 401-51.

[446] ASF, Catasto, no. 179, fos 257r-315r, no. 180, fos 331r-350v, 410v-416v, 371r-405r, 223r-248v, 627-688, no. 250, fos 449r-481r, 338v-365r, no. 246, fos 331r-354v.

Ortignano, and that is without even considering any land held in common.[447] Furthermore institutions such as Camaldoli began to organise pasture into coherent blocks, such as the 12-hectare unit at Campo Drezzale at Serravalle or the 10-hectare unit they created at Siepi by 1576.[448] Demand for pasture was so high that Camaldoli leased out all of its meadows at Asqua in 1515 to local farmers.[449]

The commercialised pastoral economy of the late medieval Casentino was supported by the emergence of long-distance transhumance – the seasonal and organised movement of animals from one grazing location to another. The lay *signorie* and large institutions saw they could profit from this development, enticing inhabitants into the system by offering transit rights and better regulation of grazing.[450] In 1419 it was noted that animals from the Casentino arrived en-masse to the winter pastures by the coast of the Maremma, and a permanent economic link between the two regions was thereby crystallised in the fifteenth century.[451]

The new pastoral economy supported a flourishing local production of woollen cloths in the area.[452] Tuscan towns had for a long time marketed country-made cloths, though this was something that the Florentine administration actually came to resent for they wanted to preserve this activity as a solely urban preoccupation.[453] During the late fifteenth and early sixteenth centuries concerted attempts were made to control production of Casentinese cloth and its marketing.[454] A vital piece of evidence for this notion was the concern of the urban guild of Prato in 1541 about the increasing number of woollen cloths introduced into the city and made in the Casentino.[455] The Prato guild eventually forbade the introduction of Casentinese cloth except through fairs, despite the fact Casentinese merchants had

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[447] *Idem*, no. 180, fos 627-688, no. 179, fos 161-252.

[448] ASF, Camaldoli, no. 183, fo. 114v; ASF, Corporazioni religiose soppresse dal Governo Francese, no. 39, fo. 9.

[449] *Idem*, no. 123, fo. 173.

[450] Cherubini, 'La società', 133.

[451] I. Imberciadori (ed.), 'Il primo statuto della dogana dei paschi maremmani (1419)', in *Per la storia della società rurale. Amiata e Maremma tra il IX e il XX secolo* (Parma, 1971), 123-4; D. Barsanti, *Allevamento e transumanza in Toscana. Pastori, bestiami e pascoli nei secoli XV-XIX* (Florence, 1987).

[452] See P. Della Bordella, *L'arte della lana in Casentino. Storia dei lanifici* (Cortona, 1996), 59-131.

[453] L. Kotelnikova, 'La produzione dei panni di lana nella campagna Toscana nei secoli XIII-XIV', in M. Spallanzani (ed.), *Produzione, commercio et consumo dei panni di lana* (Florence, 1976), 221-30; Cherubini, 'Risorse, paesaggio', 103. Also outside Tuscany, see R. Comba, 'Produzione tessile nel Piemonte tardomedievale', *Bulletino Storico-Bibliografico Subalpino*, 82 (1984), 321-62; E. Rossini & M. Mazzaoui, 'La lana come material prima nel Veneto sud-occidentale (secc. XIII-XV)', *Studie e Ricerche*, 4 (1972), 11-59.

[454] Malanima, *La decadenza,* 154.

[455] ASF, Pratica segreta, no. 157, fos 58v-64v.

always sold products in that town and at Impruneta.[456] Nonetheless we have evidence of a large sale to a merchant from Bologna in the thirteenth century and by 1400 Florentine citizens were doing the same, despite increasing restrictions put on Casentinese cloth by the city.[457] There were many instances of evasion of the restrictions imposed on Casentinese cloth.[458] By the beginning of the sixteenth century shops with looms and dying equipment were appearing right along the banks of the Arno River.[459] It was only at the end of the sixteenth century that cloth production declined in the Casentino, as was a general trend for Tuscany.[460]

The growth of the pastoral economy stimulated by the demand from cities such as Florence encouraged the emergence of local rural elites converging around the small market villages. From mediocre origins in the fifteenth century, a band of wool manufacturers, artisans, shopkeepers, notaries and petty landowners became a local ruling elite in Poppi by the mid-sixteenth century.[461] These families used the burgeoning commercial production of wool to establish strangleholds over local administrative positions and politics, and when the wool trade declined at the end of the sixteenth century, these local elites instead resorted to land concentration and accumulation.[462] Families from lowly backgrounds achieved success very quickly, establishing their enterprises in the heart of villages and marketing their produce in the same centres. Indeed through the *catasto* we can plot the emergence of a local well-to-do, owning multiple houses, and differentiated from the rest by the high quantities of cattle and sheep they possessed. By 1590, one Valerio Cascesi had accumulated 16 wool shops in the Casentino.[463]

The commercialisation of the Casentino and the marketing of produce was not limited to the pastoral economy however. Six of the 10 wealthiest inhabitants of the Casentino in 1427 were other sorts of tradesmen.

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[456] ASF, Arte della Lana, no. 15, fos 54v-55r, 79r-81r.

[457] ASA, Fondo di Murello, no. 1269, fo. 7; F. Melis, *Aspetti della vita economica medievali (Studi nell'Archivio Datini di Prato)*, i (Siena, 1962), 536-7.

[458] Benadusi, *A provincial elite*, 88.

[459] BNF, Magliabechi, no. 359, *Descrizione delle cose più essenziali e relevanti del Casentino con diversi ragguagli delle famiglia e persone, scritto l'anno 1666 da Giuseppe di Scipione Mannucci*, 112.

[460] Nonetheless both Stia and Poppi were still two of the most important cloth-producing locations in Tuscany as late as 1660, despite the decline. See ASF, Misc. Medicea, no. 459.

[461] G. Benadusi, 'Rethinking the state: family strategies in early modern Tuscany', *Social History*, 20 (1996), 157-78; *A provincial elite*.

[462] G. Benadusi, 'Ceti dirigenti locali e bande granducali nella provincia Toscana: Poppi tra Sedicesimo & Diciassettesimo secolo', in C. Lamioni (ed.), *Istituzioni e società in Toscana nell'età moderna* (Rome, 1994), 231-44.

[463] ASF, Decima granducale, no. 6852, fo. 200r.

Table 3.3 Wealthiest 10 heads of household in the Casentino Valley, 1427

Head of household	Taxable fortune (florins)	Location	Occupation
Cristofano Battista	861	Bibbiena	Spice seller
Giovanni Antonio	622	Bibbiena	Unknown
Landino Francesco	550	Bibbiena	Spice seller
Giovanni Antonio	526	Stia & Pratovecchio	Belt-maker
Andrea Meo	505	S. Martino a Vado	Peddler (Merchant)
Piero Antonio	476	S. Martino a Vado	Smith
Franceschi Matteo	447	S. Niccolo a Vado	Smith
Stefano Giovannino	441	Stia & Pratovecchio	Peasant cultivator
Venturicci Niccolo	425	Bibbiena	Peasant cultivator
Nanni Niccolo	394	S. Maria in Castello	Peasant cultivator

Source: ASF, Catasto, nos 179-81, 246, 250, 330.

One of the most important activities in the late medieval Casentino Valley was not only the production of iron as a raw material using the many mills and foundries which were powered by the fast flowing Arno River, but also the manufacture of finished products out of the material.[464] Two fifteenth century account books belonging to two ironworkers, Deo di Buono da Tracorte and his son Giovanni da Stia, provide a fantastic insight into this commercialised activity, and the relationship between iron production and manufacture of weapons, tools and machinery.[465] The premises of the two men were clearly situated in the heart of villages and served a commercial purpose. Giovanni built himself a tavern near to a shop which had just been constructed in Porciano, and had a shop in the centre of Stia.[466] We are told that goods were sold at local fairs in Vado and other unspecified places, and at a local market in Pratovecchio.[467] A great variety of products were made from iron according to the books, in particular axes and saws used by local woodcutters. Some of the products were made using old iron bought from inhabitants in the valley, which was

[464] In contrast to Pistoia and Pescia where iron had to be imported from Elba. See Herlihy, *Medieval and Renaissance Pistoia*, 173-5; Brown, *In the shadow of Florence*, 107.

[465] ASF, Reale Arcispedale di Santa Maria Nuova, nos 474-5. Attention brought to the source by L. de Angelis, 'Intorno all'attività di Deo di Buono, fabbro casentinese', *Archeologia Medievale*, 3 (1976), 429-46.

[466] For the shop, see ASF, Reale Arcispedale di Santa Maria Nuova, no. 474, fos 19r, 24r, 34r, 53r, 62r, 71r, 75r, 98r, 102r. For the tavern, see *Idem*, no. 474, fos 79r, 87r, 94v, 113r, 124v, 143r.

[467] For Vado, see ASF, *Idem*, no. 474, fo. 105r. For unspecified markets, see *Idem*, no. 474, fo. 27r, no. 475, fo. 86v. For Pratovecchio see *Idem*, no. 475, fos 78v-79r.

reworked into new objects. Interestingly the ironworkers did not rely on middlemen to provide them with the iron, for they were close enough to the foundries themselves to ensure consistent supplies.[468] Between January 13, 1469, and June 9, 1471, the duo received 1118lb of iron from Biagio di Piero di Lorenzo di Stia. The fifteenth century was the peak of iron production in the valley and numerous sources record forges serving this purpose. Three iron forges located close to the river and pertaining to the community of Raggiolo were in the hands of the aristocratic Ubertini family in the fourteenth century.[469] The significance of iron was highlighted in the books of Arezzo merchant, Lazzaro Bracci, who talked of the 'great iron of the Casentino' and how he had bought ample quantities from markets in Bibbiena.[470] Thus we see the close relationship between two commercialised enterprises in the valley: raw iron production and manufactured production of iron objects serving the needs of the local population but also sold in the market centres to meet regional and urban demand.

The number of mills in the Casentino increased in the fourteenth and fifteenth centuries, a sure sign of increasing commercialisation of production, and although many were associated with iron foundries, mills were needed for crushing grain and presses needed for grapes and olives.[471] Signorial monopoly of the rights over mills was a trait common in much of western European society from the tenth century onwards, and the Casentino was no different in that regard.[472] A pool of evidence shows various mills belonging to high status signorial families. Commonly mills were rented to local inhabitants who then acted as millers for the communities close by.

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[468] A description of the positions of the foundries is given in A. Barlucchi, 'La lavorazione del ferro nell'economia casentinese alla fine del medioevo (tra Campaldino e la battaglia di Anghiari)', *Annali Aretini*, 14 (2006), 169-200. In contrast to a view which suggested (without evidence) that Casentinese ironworkers relied on imported iron from the Magona of Pisa in R. de Roover, *The rise and decline of the Medici Bank: 1397-1494* (Washington, [red] 1999), 165.

[469] M. Bicchierai, *Il castello di Raggiolo e i conti Guidi. Signoria e società di antico regime: Raggiolo in Casentino* (Raggiolo-Montepulciano, 1994), 65-71.

[470] F. Melis, 'Momenti dell'economia del Casentino nei secoli XIV e XV', in B. Dini (ed.), *Industria e commercio nella Toscana medievale* (Florence, 1989), 195-6. On the trading activities of Lazzaro Bracci in this area of Tuscany see also F. Melis, 'Lazzaro Bracci (la funzione di Arezzo nell'economia dei secoli XIV-XV', in *Idem*, 175-91.

[471] A basic distribution for the Casentino is given in J. Muendel, 'The 'French mill' in Tuscany', *Journal of Medieval History*, 10.4 (1984), 218. However this is not nearly all of them. See also R. Marignani, 'I mulini ad acqua della zona casentinese fino alla metà del secolo XII', *Argomenti Storici*, 6-7 (1981), 22-50.

[472] For the signorial monopoly on mills across Europe, see D. Lohrmann, 'Antrieb von Getreidemühlen', in U. Lindgren (ed.), *Europäische Technik im Mittelalter, 800 bis 1400: Tradition und Innovation: ein Handbuch* (Berlin, 1990), 221-32.

For example Niccolo di Iacopo da Muglio rented a mill in Partina from the Guidi family for a period of two years in 1350, which allowed him the monopoly of milling activities not just for Partina but perhaps also Lierna and Ragginopoli.[473] The miller took a cut of the profits but provided 18 *staia* of grain to the Count every month, which amounted to one *staia* of grain (said to be approximately the total grain produced from 0.2 hectares of land)[474] from every inhabitant of the three settlements mentioned per year.[475] Other mills were leased out by the Guidi in the fourteenth century in the Casentino, while Camaldoli did the same for its mills in Soci and Partina.[476]

Another significant commercial venture was the timber trade, as the Arno River allowed for the transportation of this produce. Lumber cut by saw mills in the area was put on rafts and floated down the river to buyers.[477] The monastery of Camaldoli was also prominent in the timber trade and offered a concession on 3000 pieces of wood to Florentine Guiduccio Tolosini for 2000 florins in 1317 (normally they were 2500 florins).[478] They also demanded some of their rents to be paid in wood on their *poderi* at Monte, Lonnano, Bucena and Contra.[479] Some wood was used locally by tradesmen however, who crafted tools out of beech and heated their homes during long, hard winters.[480] The trade in wood from the forest also stimulated other local industries such as charcoal burning, an important resource for

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473 However, in general, mills in the valley were tiny and numerous and therefore difficult to monopolise for whole communities. See G. Pappacio, 'I mulini e i porti sull'Arno a monte di Firenze', in *Lontano dalle città. Il Valdarno di sopra nei secoli XII-XIII* (Florence, 2005), 191-210; 'Mulini, pescaie e porti sull'Arno a monte di Firenze: la politica di acquisizione e gestione degli impianti idraulica del monastero di San Salvi tra XII e XV secolo', in F. Sznura (ed.), *Fiumi e laghi toscani fra passato e presente: pesca, memorie, regole* (Florence, 2010), 157-76.

474 Pre-industrial measurements were often 'representational' rather than 'conventional' and reflected the time needed to plough a plot or seed required to sow it. See W. Kula, *Measures and men* (Princeton, 1986), 3-8.

475 G. Cherubini, 'La 'bannalità' del mulino in una signoria casentinese (1350)', in *Signori*, 225. Rent payment in grain by millers was apparently common in Tuscany, see G. Pampaloni (ed.), *Firenze al tempo di Dante: documenti sull'urbanistica fiorentina* (Rome, 1973), nos 177-9.

476 ASF, Notarile Antecosimiano, nos 92-4; ASF, Camaldoli, no. 125, fo. 55r, no. 136, fo. 1v.

477 ASF, Reale Arcispedale di Santa Maria Nuova, no. 475, fos 81r-82v.

478 G. Cacciamani, *L'antica foresta di Camaldoli. Storia e codice forestale* (Arezzo, 1965), 56.

479 ASF, Camaldoli, no. 589, fo. 13.

480 P. Ciampelli, *Badia Prataglia antica e moderna* (Bagno di Romagna, 1910), 49-50; R. Zagnoni, 'Comunità e beni comuni nella montagna fra Bologna e Pistoia nel medioevo', in *Comunità e beni comuni*, 18.

blacksmiths.[481] Raggiolo had a long history of close control over its communal woodland resources.[482]

Casentinese wine was also highly prized and found a willing urban market. Of all the goods recorded in the assets of households in the *catasto*, barrels of wine were the most valuable, and the large number stored by some families indicates these were intended for sale.[483] Vineyards were very common in the valley and were generally the highest valued of all lands in the *catasto*. Unlike the fragmented pieces of arable and pasture, these were more often coherent units kept *in clausura* and formed part of an isolated *podere*, or alternatively were attached to the houses and walls of the concentrated *castelli*. Camaldoli also saw the commercial sense in producing good wine and kept vineyards in demesne well into the sixteenth century, such as the '*Vigna dei Romiti*' at Pratovecchio.[484] Another commercial pursuit was the sale of bees and the production of honey. Hives were everywhere in the Appennines and the Casentino was no exception.[485] More affluent local families owned furnaces and produced mortar and roof tiles.[486] The monks of Camaldoli developed and distributed a number of different medicines and remedies from their pharmacy at the monastery.[487] Arezzo was a key market for leather from the thirteenth century onwards but leather was also bought by important Florentines such as the Datini Company.[488] In a letter written to Giuliano di Tommaso of Poppi, they described a payment of 115 florins for the leather of revered 'hairy' buffaloes.[489] The leather trade also stimulated a host of local shoemaking businesses listed in the *catasto* and a register from a shoemaker from Poppi confirms his locally sourced leather.

The production of chestnuts, important from the twelfth century onwards, continued to have significance, and while this activity leaned more towards peasant self-sufficiency rather than market production, evidence suggests the activity became at least partially commercialised. Collecting chestnuts was a risky and difficult task

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[481] See A. Seghi, *Alla macchia. Carbonai, vetturini, tagliatori* (Stia, 1983).

[482] M. Bicchierai, 'La lunga durata dei beni comuni in una comunità Toscana: il caso di Raggiolo in Casentino', in Zagnoni (ed.), *Comunità e beni comuni*, 45-60.

[483] Niccolo Nanni stored 70 barrels at his farm at S. Maria in Castello in ASF, Catasto, no. 179, fo. 67.

[484] Jones, 'A Tuscan monastic lordship', 179.

[485] ASA, Fondo di Murello, no. 1269, fo. 27r.

[486] ASF, Decima granducale, no. 6852, fos 48r, 72r, 200r.

[487] See R. Gori, 'La farmacia di Camaldoli', *Pax. Quaderni Mensili di Vita Benedettina*, 9 (1940), 14-9; G. Cacciamani, 'L'antica farmacia di Camaldoli', *Camaldoli Cittadella di Dio*, 16 (1968), 103-9; A. Meneghini & O. Fragai, 'L'antica farmacia di Camaldoli', *Erboristeria Domani*, 2 (1979), 7-14.

[488] For the importance of cattle farming in Tuscany in the thirteenth century, see D. Herlihy, *Pisa in the early Renaissance. A study of urban growth* (New Haven, 1958), 134-60.

[489] Melis, 'Momenti', 196-7.

which involved climbing trees. Many richer proprietors of the chestnut trees decided to give this work to day labourers and in the Casentino an owner paid men (often in kind) to collect and clean the chestnuts ready for sale.[490] Another commercial activity in the Casentino was the 'growth industry' of wet-nursing and the foster care of children from foundling homes in Florence. Other scholars have used the archives of urban charitable institutions to show the development of this micro-economy in the mountain regions to the east of Florence.[491] Castello San Niccolo in the Casentino was mentioned by 24 separate wet-nurses in documents of the *Ospedale degli Innocenti* in Florence, suggesting that institution had set up a network of contacts for this village.[492] Popular lyrics frequented alluded to the association between the Casentino and wet-nursing.[493] A final commercial activity undertaken in the Casentino in the late Middle Ages was the sale of trout caught in the Arno River; a food known to have found a willing elite market in many parts of medieval Western Europe.[494] We know the frequency and scale of this activity thanks to legislation from Florence, concerned not only about losing a potential supply of food upstream but also the poisoning of the river.[495] In 1450 the city threatened the people of the Casentino with substantial fines if caught poisoning the river with lime and nut shells.[496] 'Priests, clerks or other religious lay brothers' were revealed as guilty parties, showing it was not the act of desperate peasants but the organised actions of ecclesiastical institutions like Camaldoli, who then sold the fish at market. By the seventeenth century, fishing in the river by Stia and Poppi had been outlawed completely.[497] Florence was growing increasingly restless as they failed to profit from diverse commercial ventures undertaken in the Casentino in the late Middle Ages.

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[490] Cherubini, 'La civiltà', 274.

[491] See C. Klapisch-Zuber, 'Blood parents and milk parents: wet nursing in Florence, 1300-1550', in *Women, family and ritual in Renaissance Italy* (Chicago, 1985), 132-64; T. Takahasi, 'I bambini e i genitori-'espositori' dello spedale di Santa Maria degli Innocenti di Firenze nel XV secolo', *Annuario dell'Istituto Giapponese di Cultura*, 25 (1991), 35-57; Trexler, 'The foundlings of Florence'.

[492] P. Gavitt, *Charity and children in Renaissance Florence: the Ospedale degli Innocenti 1410-1536* (Ann Arbor, 1990), 227.

[493] C. Singleton (ed.), *Canti carnascialeschi del Rinascimento* (Bari, 1936), nos 29, 94.

[494] See more generally, Hoffman, 'Economic development and aquatic ecosystems', 649-50.

[495] Trexler, 'Measures against water pollution', 462-7.

[496] ASF, Provvisioni Registri, nos 175-6.

[497] Z. Pignoni, *Bando, e prohibizione di non poter pescare nel fiume de l'Oia in Casentino nel Vicariato di Poppi. E non poter pescare dal principio d'Arno fino al ponte di Stia sopra Arno* (Florence, 1619). Found in the BNF.

D: Power balance

As early as the first decades of the twelfth century, a doctrine had already emerged suggesting that Florence had a legitimate claim to the close countryside.[498] Many of the very immediate rural communes were brought to heel by the city very quickly, such as Fiesole in 1125 and the *castrum* of Montebuoni in Impruneta in 1135.[499] Between the eleventh and thirteenth centuries, important rural nobles relocated from the *contado* to Florence (for example, the Medici moved to the city from the Mugello in the late twelfth century), but always retained patronage rights over the churches and monasteries and connections in the rural borghi from which they had come.[500] Thus, by the beginning of the fourteenth century in the *contado*, there was no alignment of local power structures that had the propensity to stand-up to Florentine jurisdictional, fiscal and landed encroachment. By the beginning of the fourteenth century in the *contado*, there was no alignment of local power structures that had the propensity to stand-up to Florentine jurisdictional, fiscal and landed encroachment. There were no rural interests which stood in direct opposition to urban interests, simply because there was no sharp distinction made between rural and urban. The rural *signori* or *nobili* of the *contado* were at the same time, urban citizens or burghers.[501] While, for example, in medieval Flanders, there grew strong oppositions between powerful interest groups such as the urban guilds, territorial lords, and signorial lords (cultivating a real rural-urban opposition), the interest groups of Florence and the *contado* were one and the same.[502] There can be little support for the notion that the rural communes were the product of a rural aristocracy antithetical to a rising urban bourgeoisie. In any case, the ratio of rural to urban magnates declined through the fourteenth century, it became increasingly impossible to tell whether a baronial family had 'rural' or 'urban' origins, and even the notion of 'gentility' came to be seen as an essentially urban concept, linked to urban residence and citizenship.[503] This bond between city and countryside was reinforced by a

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[498] See P. Santini (ed.), *Documenti dell'Antica Costituzione del Comune di Firenze* (Florence, 1895), nos 1-2.

[499] R. Davidsohn, *Forschungen zur älteren Geschichte von Florenz*, i (Berlin, 1896), 358, 392-6, 416.

[500] G. Brucker, *Florence, the Golden Age, 1138-1737* (Berkeley & Los Angeles, 1998), 28.

[501] A similar point made for the countryside surrounding Lucca in Wickham, *Community and clientele*, 172-6.

[502] Nicholas, 'Town and countryside; *Town and countryside*, 152-5. Also see Blockmans, 'Stadt, Region und Staat', 211-26.

[503] Jones, *The Italian city-state*, 280, 300-1. Linked to this was the cult of chivalry and courtly-life, as described in J. Larner, 'Chivalric culture in the age of Dante', *Renaissance Studies*, 2 (1988), 120; A.

network of landed and family relationships and the very fact that despite the rise of Florence as an international commercial hub, Florentine economic fortunes were still undoubtedly tied up in agrarian interests.[504] The lack of strong oppositional interest groups facilitated the late-medieval Florentine encroachment into the rural *contado*.

Although Florence slowly extended its jurisdiction further into the *distretto* during the fourteenth and fifteenth centuries, it was a process not without its problems, and furthermore, Florence probably did not exert the sort of dominant authority it would have liked (particularly when taken in comparison with the *contado*). Valley communities such as the Valdinievole enjoyed extended periods of independence from urban territorial subjection,[505] while the Alpi fiorentine experienced almost permanent fiscal and corporate exemptions.[506] It was exceedingly difficult to penetrate through the assorted layers of power and jurisdictions in the distant mountains, where there existed a peculiar balance of signorial, territorial, ecclesiastical, communal, and village interests. Illustrative of the tension between rural *signori* in the *distretto* and the commune of Florence is the wealth of material describing assaults on Florentine merchants passing through the Alpi degli Ubaldini.[507] The aristocratic families of the Guidi and Ubertini had land, jurisdictions and castles all over the mountains of Romagna and the Casentino (even though it was slightly checked by partible inheritance creating waring factions.[508] The Florentine

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Roncaglia, 'Civilità cortese e civilità Borghese nel Medioevo', in V. Branca (ed.), *Concetto, storia, miti e immagini del Medioevo* (Florence, 1973), 286.

[504] P. Jones, *Economia e società nell'Italia medievale* (Turin, 1980), 44, 345; H. Hoshino, 'Per la storia dell'arte della lana in Firenze nel Trecento e nel Quattrocento: un riesame', *Istituto Giapponese di Cultura. Annuario*, 10 (1972-3), 49.

[505] G. Calamari, 'La lega dei comuni di Valdinievole e la loro pace Firenze (1328-1329)', *Bullettino Storico Pistoiese*, 28 (1966), 144-59.

[506] C. Guasti (ed.), *I capitoli del commune di Firenze. Inventario e regesto*, i (Florence, 1866), 89-90.

[507] G. Villani, *Cronica*, ed. I. Moutier (vols 1-4, Florence, 1826), i, 48-9, 203, 287-90, iii, 308-9, iv, 279-80, 289-90; D. Sterpos, 'Evoluzione delle comunicazioni transappenniniche attraverso tre passi del Mugello', in *Percosi e Valichi dell'Appennino fra storia e leggenda. Futa, Osteria Bruciata, Giogo. Manifestazione espositiva itinerante* (Florence, 1985), 13; F. Sacchetti, *Il libro del rime*, ed. F. Ageno (Florence, 1990), 225. See also J. Larner, 'Crossing the Romagnol Appennines in the Renaissance', in Dean & Wickham (eds.), *City and countryside*, 147-70; G. Cherubini, 'Appunti sul brigantaggio in Italia alla fine del medioevo', in *Studi di storia medievale e moderna per Enesto Sestan: medioevo*, i (Florence, 1980), 103-33.

[508] See E. Sestan, 'I conti Guidi e il Casentino', in *Italia medievale* (Naples, 1966), 356-78; T. Casini, 'The minor rural aristocracy and great lords in thirteenth-century Tuscany: three cases from the entourage of the Guidi counts', *Journal of Medieval History*, 37.2 (2011), 180-96; R. Rinaldi, 'Le origini dei Guidi nelle terre di Romagna (secoli IX-X)', in *Formazione e strutture dei ceti dominanti nel Medioevo: marchesi conti e visconti nel Regno italico (secc. IX-XII)*, ii (Rome, 1996), 211-40.

administration strategically founded new towns close to the Appennines to the north and east of the city, in order to compete in an area dominated by rebellious nobles.[509]

Some of the mountain communities were very strong, often aligning themselves with signorial interests in order to stave off rising Florentine interference.[510] The *signori* in turn recognised the benefits of keeping rural communities 'on-side', granting mountain villagers their own control over the operation and regulation of the forests.[511] In the mountains in the direction of Arezzo, villagers under the jurisdiction of the Ubertini suggested they enjoyed living 'in peace under the dominion of their true *signore*'.[512] Rural communities and signorial lords often teamed up in order to maintain control of settlements and territories. For example, in an episode of peasant insurrection in 1391 in Raggiolo, inhabitants of the village petitioned the troops of the aristocratic lords of Pietramala to assist them in regaining control of the village.[513] Life as feudal subjects to these lords was by no means perfect, but it was a lot better than the harsh rates of taxation they would have to pay to the Florentine administration. As it happened the villagers regained their castle at Raggiolo, and although Florentine troops later exacted retribution by burning some of the village to the ground, the Florentine administration also realised the need for concession and compromise in these mountain areas – including a five year tax exemption for the villagers affected by the conflict.[514]

Lay aristocrats and villagers put up strong resistance to save their jurisdictions. Some villages were conceded to the Florentine administration in the mid-fourteenth century, such as Pratovecchio in 1343, Castel San Niccolo in 1348, or Bibbiena in 1359, but others took much longer to bring to heel.[515] The Palagio branch of the Guidi family in Stia only fell to Florentine administration in 1402, and Count

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[509] Osheim, 'Rural Italy',166; R. Francovich, E. Boldrini & D. Di Luca, 'Archeologia delle terre nuove in Toscana: il caso di San Giovanni Valdarno', in Comba & Settia (eds.), *I borghi nuovi*, 155-94; C. Fabbri, *Statuti e riforme del comune di Terranuova, 1487-1685* (Florence, 1989), intro.

[510] Argued also in P. Pirillo, 'Il popolamento tra signorie territoriali e dominio fiorentino', in *Costruzione di un contado. I fiorentini e il loro territorio nel Basso Medioevo* (Florence, 2001), 39-53; M. Bicchierai, 'La signoria dei conti Guidi in Valdarno. Osservazioni ed ipotesi', in G. Pinto & P. Pirillo (eds.), *Lontana dalle città. Il Valdarno di Sopra nei secoli XII-XIII* (Rome, 2005), 115.

[511] Zagnoni, 'Comunità'.

[512] ASA, Diplomatico, pergamente e carte varie, no. 91. Also for the peasant *fideles* of the Ubertini and Guidi, see Cohn, 'Demography', 200.

[513] Indeed, the people of Raggiolo and the Guidi lords had a long history of cooperative treaties drawn up. See C. de la Roncière, 'Fidélités, patronages, clientèles dans le contado florentin au XIVe siècle', *Ricerche Storiche*, 15.1 (1985), 37.

[514] Cohn, *Creating the Florentine state*, 125.

[515] Pasqui (ed.), *Arezzo,* iii, no. 832.

Francesco Guido only lost the town of Poppi as late as 1440 because he made the error of aligning his interests with that of Filippo Maria Visconti, the Duke of Milan.[516] Furthermore, even where Florence did take control of settlements and territories in the mountains, there was always some tricky negotiation to consider. The aristocratic Ubertini family managed to save their jurisdictions over the villages of Chitignano, Rosina, and Taena in the late fourteenth century, by making tactical concessions elsewhere.[517] The balance of signorial and communal interests in parts of the *distretto* proved to be awkward obstacles for the Florentine state to overcome.

3.5 Conclusions: the city and countryside in medieval Tuscany

In pre-industrial Europe, the fortunes of cities and countryside were often entwined. However, as seen from this case study on late-medieval Tuscany, rural regions responded in divergent ways to urban influence. The literature tends to explain this through an 'urban-lens' or an 'urban-bias': the divergent fortunes of rural areas must have been down to the differing objectives pursued by urban institutions and actors. In this line of reasoning, perhaps a city was more interested in exhaustively exploiting a certain rural region's resources more than another's. In this paper however, it is argued that the divergent fortunes that rural areas experienced in their relationships with cities can actually be explained through the differing configurations of rural societies, themselves. Essentially, some rural regions were well set-up to repel urban extractive tendencies, while others were susceptible to exploitation. Furthermore, the particular alignment of these societal configurations dictated the way in which cities and towns chose to exploit its rural hinterlands. To put this point in a comparative context, the powerful medieval cities of Flanders such as Bruges and Ghent did not exploit their respective rural environs for a supply of grain (getting it instead from northern France) because the small farmer property structure, intensively cultivating tiny micro-plots did not fit with this objective.[518]

So, in summary, the late-medieval decline in fortunes of the rural settlements in the Florentine *contado* was caused by urban exploitation, however, such exploitation was facilitated in the first instance by a number of 'distorted' societal constellations in the *contado* itself, some of which had been locked-in over the long-term. One of the key problems was the lack of distinction made between 'urban' and

[516] C. Beni, *Guida del Casentino* (Florence, 1983), 250-1; Bicchierai, Una comunità, 13.

[517] G. Cherubini, 'La signoria degli Ubertini sui comuni rurali casentinesi di Chitgnano, Rosina e Taena all'inizio del Quattrocento', *ASI*, 126 (1968), 151-69.

[518] On this issue, see Thoen, 'Social agrosystems'; 'A commercial survival economy'.

‘rural’ interests; a rural elite did not emerge in the *contado* to counter urban predations, because these rural elites (as early as the twelfth century) were essentially urbanites. This contributed to a distorted property structure, whereby urban expropriation of country-dwellers’ land was made easier by urban courts siding with urban landowners and speculators. The skewed property structure eventually lent itself to imperfections in other societal constellations: the disappearance of welfare-systems such as the commons, the imposition of *mezzadria* to counter defective balances in factor markets (land, labour, capital), and the restricted economic portfolios which followed.

In contrast, the Casentino Valley, an area of the Florentine *distretto* further away from the city’s immediate hinterlands, was better equipped to repel urban predations, despite obvious Florentine territorial ambitions and advances in the fourteenth and fifteenth centuries. Florentine institutions and burghers failed to penetrate through this mountain society’s balance of signorial, territorial, ecclesiastical, communal, and village interests. The rural aristocracy, unlike in the *contado*, were antithetical to interests of the city, vigorously standing their ground, often with support of the local communities. Furthermore, there was no urban accumulation of land in this region; thwarted by the highly levels of continuity in local peasant-farmer property ownership, the consolidation of large ecclesiastical estates (e.g. Camaldoli), and the persistence of common rights over the forest. In addition to an ability to stave off potential urban predation, the people and institutions of the Casentino followed a wide, varied, and flexible balance of economic activities (making full use of the local resources) and modes of exploitation, in the process actually benefitting from rising Florentine demand for products (which could not be made in the *mezzadria*-dominated *contado*) and selling them in small coherent market centres across the valley.

Chapter 4
Two paths toward late-medieval demographic and settlement decline in Cambridgeshire, 1200-1400

It is well-known that historians working on medieval England are fortunate to have at their disposal a wealth of manuscript material for reconstructing aspects of rural society, economy, and demographic trends; far more than what is generally available to historians working on other parts of Western Europe. Much of this comes down to the excellent survival of various manorial documents, and as a result, some of the best micro-studies which attempt to reconstruct medieval rural life focus on England. Exceptional access to sources has led to some important debates between social and economic historians of the late Middle Ages, often centred around the role and consequences of the Black Death. One of the big debates has been whether the great demographic downturn experienced in late-medieval England (as across the whole of Western Europe) began with the onset of the Black Death, or rather had already begun, perhaps more than fifty years previous.

The second interpretation has been more closely associated with the work of Michael Postan, probably as a result of his emphasis on a population-resources framework for interpreting the late-medieval economic crisis. According to Postan, the relentless surge in population in England from the eleventh to the thirteenth century put an enormous strain on what was essentially a finite level of resources (i.e. land). As a result of the need to bring more land into cultivation, arable farming was increasingly extended to 'marginal areas' - areas with poor infertile soils which were not suited to this kind of agriculture. Accordingly, the over-exploitation of resources by the late thirteenth century eventually led to the reversal of the demographic trends, and set in motion a process of contraction in settlement and cultivation a long time before the Black Death hit England.[519] Postan's 'early-stagnationist' framework has been supported by works from some of the most highly regarded medievalists working on other parts of Western Europe (to various extents, it must be added) – the likes of Georges Duby, Wilhelm Abel, and Bernard Slicher van Bath, to name a

[519] See, in particular, Postan, 'Some economic evidence of declining population'. The abandonment of marginal land also taken up in W. Hoskins, 'The deserted villages of Leicestershire', *Transactions of the Leicestershire Archaeological Society*, 22 (1946), 241-64; *The making of the English landscape* (London, 1955), 89-95; M. Postan & J. Hatcher, 'Population and class relations in feudal society', in T. Aston & C. Philpin (eds.), *The Brenner Debate: agrarian class structure and economic development in pre-industrial Europe* (Cambridge, 1985), 75-6. The difficult environment of the 'margins' even appears in some very recent explanatory frameworks; for example, see the late-medieval decline of settlement described for parts of County Durham in R. Jones, 'Contrasting patterns of village and hamlet desertion in England', in Dyer & Jones (eds.), *Deserted villages revisited*, 19.

few.[520] It was also a thesis well defended in England by some of Postan's best-known supporters.[521]

It is not necessary to subscribe to Postan's (now well disputed)[522] views on the 'margins', to support the idea of an early contraction in settlement and cultivation, however. A number of scholars have by working on their own micro-regions produced demographic data supporting decline in parts of England before the Black Death.[523] Indeed, the notion of contraction in settlement well before the Black Death is not illogical, because it is well-known that Western Europe suffered a spate of pestilence and famine in many periods of the early fourteenth century – in particular, the Great Famine of 1315 to 1322.[524] Some credence is also given to the 'early stagnation view' by the evidence of settlements being deserted or abandoned before the Black Death.[525] Furthermore, it seems that from the onset of the fourteenth century, the founding of new towns fell away entirely.[526] In contrast to this evidence, there is a wealth of literature which opposes this view, and instead emphasizes the role played by the Black Death in demographic decline.[527] Under this interpretation,

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[520] Some of the classic works include Slicher van Bath, *De agrarische geschiedenis van West-Europa*; Duby, *L'économie rurale*; Abel, *Agrarkrisen und Agrarkonjunktur*. Although it must be acknowledged that Postan never associated himself formally with this group. See A. Verhulst, 'Medieval socio-economic historiography in Western Europe: towards and integrated approach', *Journal of Medieval History*, 23.1 (1997), 91.

[521] J. Titow, *English rural society, 1200-1350* (London, 1969), 64-96; E. Miller, 'The English economy in the thirteenth century: implications of recent research', *Past & Present*, 28 (1964), 39.

[522] Bailey, 'The concept of the margin'; Dyer, 'The retreat from marginal land'.

[523] J. Bennett, *Women in the medieval English countryside: gender and household in Brigstock before the Plague* (Oxford, 1987), 228-9; E. Britton, *The community of the vill: a study in the history of the family and village life in fourteenth century England* (Toronto, 1977), 132-43; E. Dewindt, *Land and people in Holywell-cum-Needingworth: structures of tenure and patterns of social organisation in an east Midlands village, 1252-1457* (Toronto, 1971), 166-70.

[524] I. Kershaw, 'The Great Famine and agrarian crisis in England, 1315-1322', *Past & Present*, 59 (1973), 3-50. For a Western European context, see W. Jordan, *The Great Famine. Northern Europe in the early fourteenth century* (Princeton, 1996).

[525] D. Miles & T. Rowley, 'Tusmore deserted village', *Oxoniensia*, 41 (1976), 309-15; Dyer, 'Deserted medieval villages'.

[526] M. Beresford, *New towns of the Middle Ages* (London, 1967), 319-38.

[527] B. Harvey, 'The population trend in England between 1300 and 1348', *Transactions of the Royal Historical Society*, 16 (1966), 23-42; Razi, 'Family, land and the village community'; B. Campbell, 'Population pressure, inheritance and the land market in a fourteenth-century peasant community', in R. Smith (ed.), *Land, kinship and life-cycle* (Cambridge, 1984), 87-134; H. Hallam, 'Population movements in England, 1086-1350', in *The agrarian history of England and Wales*, ii (Cambridge, 1988), 511; J. Russell, 'The pre-plague population of England', *Journal of British Studies*, 5 (1966), 21; L. Poos, 'The

settlement and cultivation did not retract until much later in the fourteenth century, perhaps supported by the fact that the highest proportion of settlement desertions in England fall into the period 1370-1520 (after the ravages of the Black Death).[528]

It is not the intention of this chapter to pledge support to either side of the debate. Instead, the demographic and settlement trends in two areas of late-medieval Cambridgeshire are compared. While one area (East Chilford) in south-east Cambridgeshire showed signs of population collapse well before the Black Death, another area just 15km to the west had their contraction much later in the fourteenth century – possibly hinting to a greater role played by the plague. In this chapter, some consideration is given to the reasons why settlements in East Chilford began to show greater levels of decline earlier than in the Bourn Valley. It is concluded that the contrasting ways in which the two societies were organised and configured in the thirteenth and fourteenth centuries, played a significant role in the different extents and timing of settlement contraction.

In the first section, the geographical and environmental context of the two areas is described, including any information about the settlement structures prior to the onset of the thirteenth century. Here it is shown that the two areas had settlements which were already arranged differently across the landscape before 1200. In the second section, the evidence is provided for the different timing of the late-medieval population decline between the Bourn Valley and East Chilford. The methodological limitations and problems are discussed. In section three, it is shown that social and economic structures in East Chilford changed a lot earlier than in the Bourn Valley – in particular, an earlier decline of the manorial system and fragmentation of former demesnes ready for sale or lease to tenants. Meanwhile, in the Bourn Valley, the open-field system and direct demesne agriculture through manorial lords lingered on well past the year 1400. In section four, some consideration is given to why the early changes in East Chilford led to a more extreme and earlier demographic and settlement decline – well before the Black Death. A number of interrelated factors are discussed including the increased economic polarisation of society, the higher levels of freedom and mobility, the infringement into the commons and woodlands, the focus on pastoral farming, and the differing demands for labour on the demesnes. In section five, some attention is given to the later decline in the Valley, and this is followed finally with a conclusion.

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rural population of Essex in the later Middle Ages', *Economic History Review*, 38 (1985), 515-30; R. Lomas, *North-East England in the Middle Ages* (Edinburgh, 1992), 160.

[528] C. Dyer, *Making a living in the Middle Ages. The people of Britain 850-1520* (London, 2002), 350.

4.1 Geographical context and settlement development prior to 1200

The settlement pattern of Central England today stands in stark contrast to the settlement pattern of South-East England. The Midland Belt of England is characterised by concentrated villages,[529] while South-Eastern England exhibits a dispersed pattern of small hamlets and isolated farmsteads. The differences between the two regions of England have long been acknowledged by scholars, contrasting landscapes characterised as 'champion' against 'woodland', 'planned' against 'ancient', or simply the 'central province' against the 'south-eastern province'.[530] It is likely that the divergence in settlement patterns between these two areas of England developed at least at some stage in the Middle Ages.[531] It is a logical suggestion to make given that most scholars accept that habitation in Central England became increasingly concentrated within coherent villages in a process sometime between 700 and 1200 (though the timing of settlement concentration varied within the province).[532] The same process of settlement concentration did not happen in South-East England.

Cambridgeshire is a county which is divided down the middle by the proposed settlement boundary between Central and South-Eastern England.[533] In the west it is a landscape of wide open views and concentrated villages, while in the east it is

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[529] However, it must be noted that the number of small hamlets identified in the 'Midland Belt' of England has grown through recent scholarship. See, for example, H. Fox, 'The Wolds before c. 1500', in J. Thirsk (ed.), *Rural England* (Oxford, 2000), 50-61; C. Dyer, 'Villages and non-villages in the medieval Cotswolds', *Transactions of the Bristol & Gloucestershire Archaeological Society*, 120 (2002), 11-35; C. Taylor, 'Dispersed settlement in nucleated areas', *Landscape History*, 17 (1995), 27-34.

[530] See B. Roberts & S. Wrathmell, *Region and place: a study of English rural settlement* (London, 2002), 1-10; *An atlas of rural settlement in England* (Swindon, 2000), 2, 5, 15. Roberts and Wrathmell's 'provinces' idea was based on a long historiography which had already identified different landscape boundaries in England. The dominant works are H. Gray, *English field systems* (Cambridge MA, 1915); Beresford & Hurst, *Deserted medieval villages*, 66; H. Thorpe, 'Rural settlement', in J. Sissons & J. Watson (eds.), *The British Isles: a systematic geography* (London, 1964), 358-79; B. Roberts, *Rural settlements in Britain* (Folkestone, 1977), 16; O. Rackham, *The history of the countryside* (London, 1986), 4-5.

[531] As suggested in Roberts & Wrathmell, *Region and place*, 134-46.

[532] See H. Hamerow, *Early medieval settlements: the archaeology of rural communities in North-West Europe 400-900* (Oxford, 2004), 120-4; 'Settlement mobility and the 'Middle Saxon shift': rural settlements and settlement patterns in Anglo-Saxon England', *Anglo-Saxon England*, 20 (1991), 1-17; C. Taylor, *Village and farmstead: a history of rural settlement in England* (London, 1983), 130-1; T. Williamson, *Shaping medieval landscapes: settlement, society, environment* (Macclesfield, 2003), 14.

[533] That is the provinces boundary based on nineteenth century mapping in Roberts & Wrathmell, *Region and place*, 1-10.

characterised by little woods, hedgerows and narrow twisting lanes and small hamlets and isolated farmsteads.[534] Thus, in accordance with expectations, the Bourn Valley (West Cambridgeshire) contains a number of concentrated villages, while East Chilford (South-East Cambridgeshire) contains small hamlets and scattered farms. As seen on the map below, these two case studies are separated by the proposed national settlement boundary created by Brian Roberts and Stuart Wrathmell.

Figure 4.1 The three 'provinces' of England based on Roberts and Wrathmells' map and the location of the Bourn Valley and East Chilford case studies

[534] The contrast in the landscapes noted in C. Taylor, *Cambridgeshire landscape: Cambridgeshire and the Southern Fens* (Cambridge, 1973). A landscape difference well-highlighted visually in E. Martin & M. Satchell, 'Wheare most inclosures be – East Anglian fields: History, morphology and management', *East Anglian Archaeology*, 124 (2008), 1-270.

Given a general consensus that habitation in Central England became concentrated into villages at various stages between 700 and 1200, it is entirely logical to suggest that the settlement divergence between the Bourn Valley and East Chilford occurred sometime within this period of the Middle Ages. It is not the intention of this chapter to be any more explicit on the dates than that, for one does not want to be dragged into a polemical debate amongst British historians and archaeologists on the 'origins of nucleated settlement' in England.[535] All that will be said is that by 1200, the concentration of settlement in the Bourn Valley had been more or less completed.

Limited evidence supports this assertion – the best of which is probably the distribution of moated dwellings in the two areas, particularly given that it is widely accepted that they were built in an approximate phase running from the early thirteenth to early fourteenth century in England.[536] In the Bourn Valley, 75 percent of the moats were situated at the heart of villages, suggesting that by the thirteenth century settlement decisions were already being orientated towards villages. This point is strengthened by the fact that most of these moats were not merely manorial residences but owned by wealthy tenants. Such people likely wanted to show off their heightened economic fortunes to their neighbours as visible expressions of social status (after all moats were predominantly status symbols),[537] perhaps inspired by the 'landscapes of lordship' created by signorial lords with their manor house

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[535] See the historiographical essay in G. Astill, 'The long and the short: rural settlement in medieval England', in Goddard et al. (eds.), *Survival and discord*, 11-28.

[536] D. Wilson, *Moated sites* (Princes Risborough, 1985), 28; J. Le Patourel, *Moated sites of Yorkshire* (London, 1973), 16-9; 'Documentary evidence', in F. Aberg (ed.), *Medieval moated sites: research report* (London, 1978), 27; B. Roberts, 'The historical geography of moated homesteads: the Forest of Arden, Warwickshire', *Transactions of the Birmingham & Warwickshire Archaeological Society*, 88 (1976-7), 61-70; 'Moated sites in Midland England', *Transactions & Proceedings of the Birmingham Archaeological Society*, 80 (1965), 26-37; 'Moats and mottes', *Medieval Archaeology*, 8 (1965), 219-22; 'Moated sites', *Amateur Historian*, 10 (1972), 34-8; J. Le Patourel & B. Roberts, 'The significance of moated sites', in Aberg (ed.), *Medieval moated sites*, 46-7, 51; F. Emery, 'Moated settlements in England', *Geography*, 47.4 (1962), 384; S. Oosthuizen, 'Medieval greens and moats in the central province: evidence from the Bourn Valley, Cambridgeshire', *Landscape History*, 24 (2002), 73-88; D. Williams, 'Fortified manor houses', *Transactions of the Leicestershire Archaeological & Historical Society*, 50 (1974-5), 1-16; T. Rowley, *The high Middle Ages, 1200-1550* (London, 1986), 46. It has been suggested that by the end of the fourteenth century moated sites were being transformed into ornamental gardens instead. See C. Taylor, 'Medieval ornamental landscapes', *Landscapes*, 1.1 (2000), 38-55; *The archaeology of gardens* (Princes Risborough, 1983).

[537] C. Taylor, 'Medieval moats in Cambridgeshire', in P. Fowler (ed.), *Archaeology and the landscape* (Cambridge, 1972), 237-49.

overlooking subordinate tenant plots. Meanwhile in East Chilford, moats were scattered widely across the parishes, some belonging to manors and some belonging to wealthy tenants. The lonely position of the moats shows that in the thirteenth and fourteenth centuries, many local inhabitants were choosing to settle not in a village formation but in a dispersed fashion. In contrast to visibly asserting their social status at the heart of villages, many people wanted to live in a landscape of exclusion perhaps inspired by the prominence of the signorial park.[538]

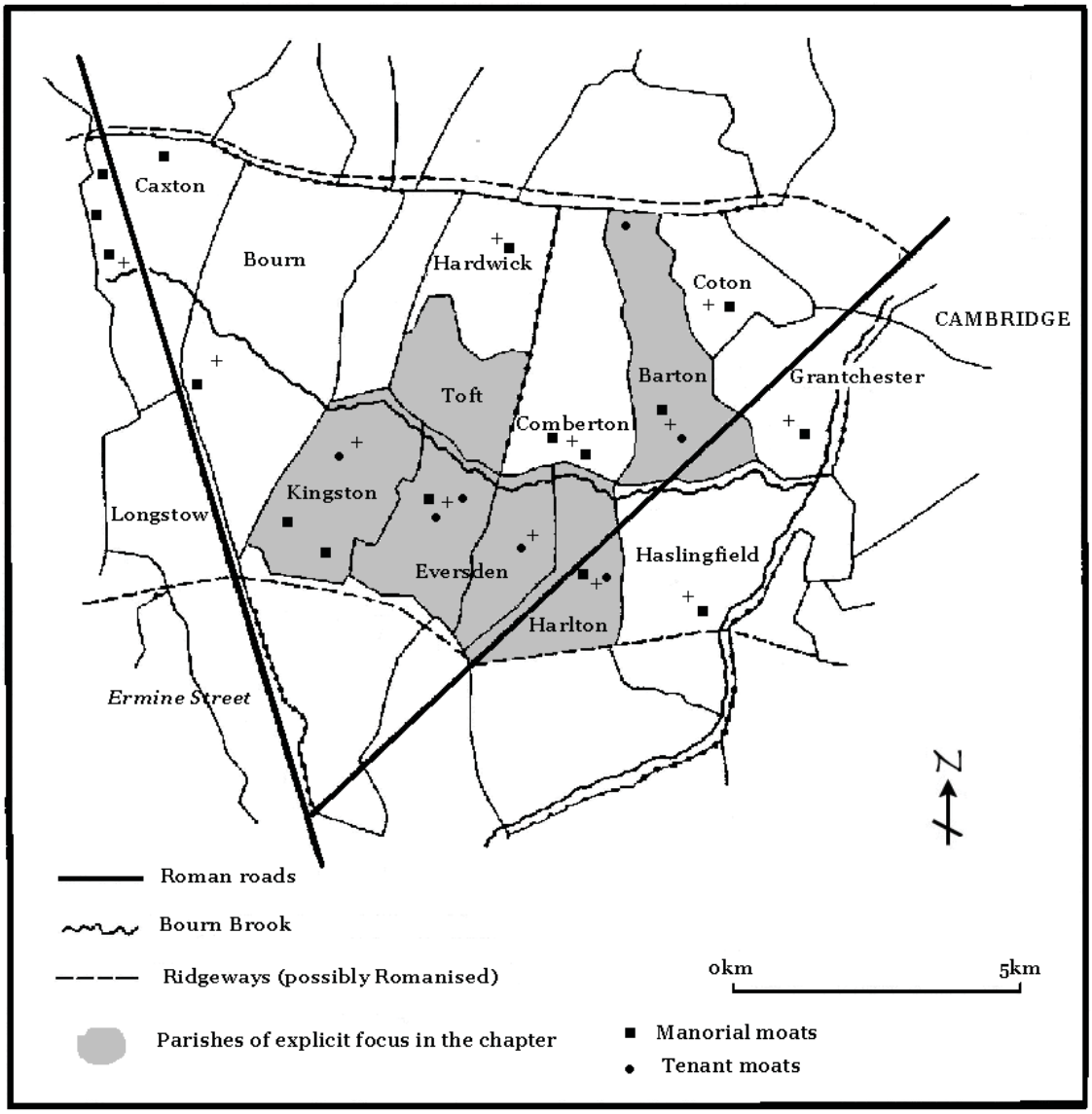
Table 4.1 Distribution and status of moats in East Chilford and the Bourn Valley, c. 1200-c. 1350

	Status		**Position**		
	Manorial	**Tenant**	**Village**	**Hamlet**	**Isolated**
West Wickham	4	1	0	2	3
Castle Camps	2	5	0	1	6
Horseheath	3	6	0	1	8
Shudy Camps	3	5	0	2	6
Bartlow	0	0	0	0	0
East Chilford	**12**	**17**	**0**	**6**	**23**
Kingston	2	1	1	0	2
Barton	1	2	2	0	1
Toft	0	0	0	0	0
Harlton	1	1	2	0	0
Eversden	1	3	4	0	0
Bourn Valley	**5**	**7**	**9**	**0**	**3**

Source: Cambridgeshire Historic Environment Record, Shire Hall, Cambridge

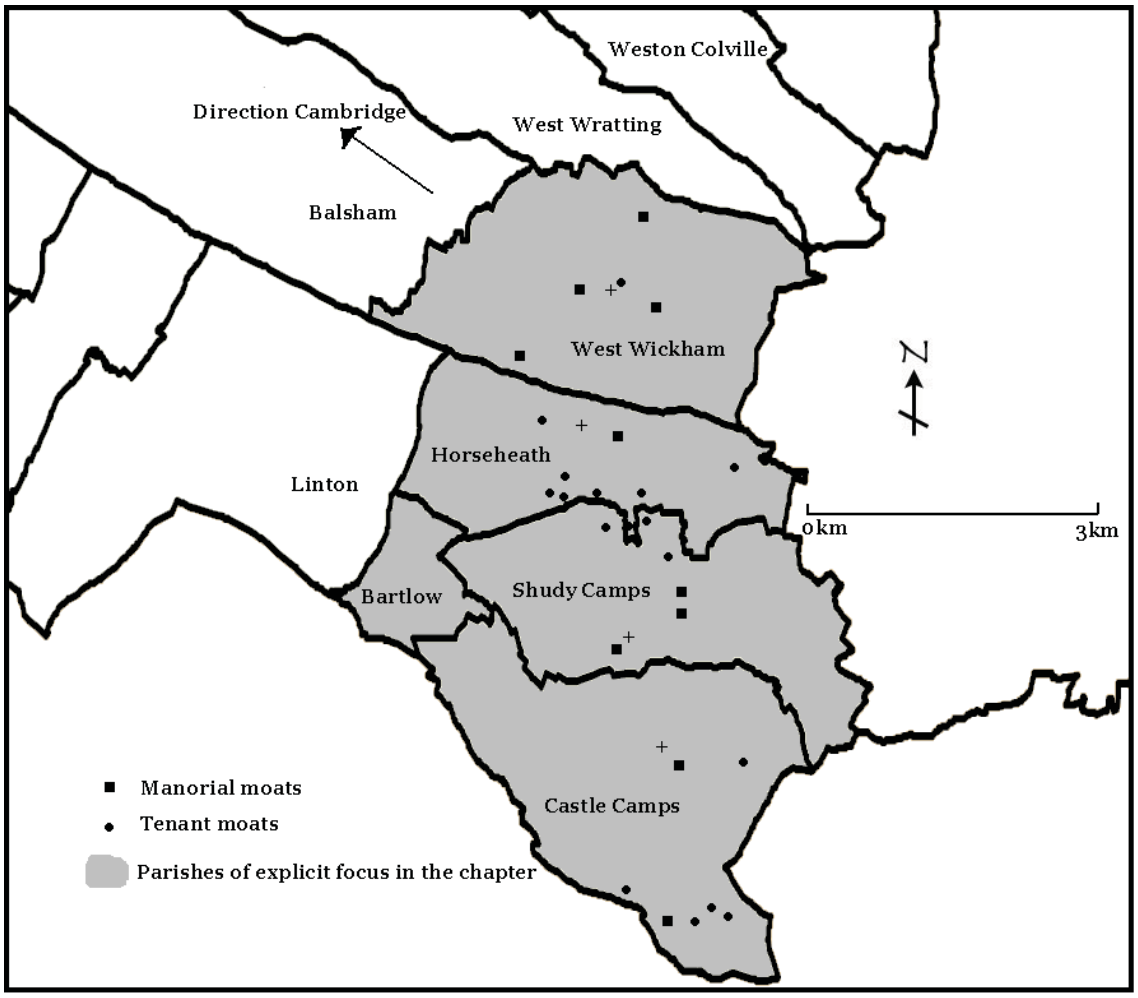
[538] As noted elsewhere in an important article by Dyer, 'Conflict in the landscape', 27. Castle Camps parish in East Chilford was dominated by the signorial park belonging to the Earl of Oxford and the location of all moats respected its boundaries. C. Taylor, 'Cambridgeshire earthworks surveys: motte and bailey castle and deserted village, Castle Camps', *Proceedings of the Cambridgeshire Antiquarian Society*, 64 (1973), 38-41; O. Creighton, *Castles and landscapes* (London, 2002), 191.

Figure 4.2 Layout of the Bourn Valley parishes with distribution of moats



Adapted from: S. Oosthuizen, *Landscapes decoded: the origins and development of Cambridgeshire's medieval fields* (Hatfield, 2006), 65.

Figure 4.3 Layout of the East Chilford parishes with distribution of moats



Source: Cambridgeshire Historic Environment Record, Shire Hall, Cambridge

Some work on settlement development prior to 1200 in the Bourn Valley has already been conducted by Susan Oosthuizen; however, while the evidence for the development of the different field systems and boundaries is convincing, the paucity of good evidence for settlement means the conclusions on patterns of early medieval habitation are less secure or certain, something which Oosthuizen acknowledges in her book herself.[539] In short, Oosthuizen argues for a two-stage development of concentrated settlement in the Bourn Valley,[540] the first being the informal clustering of habitation around points of common pasture and meadow contiguous with the working of a 'proto-common field system' based on very ancient readapted boundaries (in line with a greater emphasis on pastoral stock farming in early and middle Anglo-Saxon Central England).[541] The second stage of concentration apparently occurred from the eleventh century onwards, as settlement shifted due to the formalisation of a more orthodox system of open fields.

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[539] See Oosthuizen, *Landscapes decoded*, 59-64, 145-8. For the field systems, see S. Oosthuizen, 'New light on the origins of open field farming?', *Medieval Archaeology*, 49 (2005), 165-93; 'The roots of the common fields: linking prehistoric and medieval field systems in west Cambridgeshire', *Landscapes*, 4.1 (2003), 40-64; 'Prehistoric fields into medieval furlongs? Evidence from Caxton, South Cambridgeshire', *Proceedings of the Cambridge Antiquarian Society*, 86 (1998), 145-52; 'A note concerning the distribution of two- and three-field systems in south Cambridgeshire before about 1350', *Medieval Settlement Research Group Annual Report*, 25 (2010), 21-31. For settlement see S. Oosthuizen, 'Medieval settlement relocation in west Cambridgeshire: three case studies', *Landscape History*, 19 (1997), 43-55; 'Saxon commons in South Cambridgeshire', *Proceedings of the Cambridge Antiquarian Society*, 83 (1994), 93-100; 'Medieval settlement plans in west Cambridgeshire: a re-examination', *Landscape History*, 18 (1997), 43-55.

[540] A two-phase process as noted elsewhere in A. Brown & G. Foard, 'The Saxon landscape: a regional perspective', in *The archaeology of landscape* (Manchester, 1998), 74; G. Foard, 'Systematic fieldwalking and the investigation of Saxon settlement in Northamptonshire', *World Archaeology*, 9.3 (1978), 370; C. Taylor, 'Nucleated settlement: a view from the frontier', *Landscape History*, 24 (2002), 53-71. Informal clustering around points of pasture argued for in A. Davison, 'The evolution of settlement in three parishes in south-east Norfolk', *East Anglian Archaeology*, 49 (1990), 18-9; P. Warner, *Greens, commons and clayland colonization: the origins and development of green-side settlement in east Suffolk* (Leicester, 1987), 32.

[541] An emphasis on pastoral farming suggested in D. Hall, 'The Late Saxon countryside: villages and their fields', in D. Hooke (ed.), *Anglo-Saxon settlements* (Oxford, 1988), 107; T. Williamson, 'Parish boundaries and early fields: continuity and discontinuity', *Journal of Historical Geography*, 12 (1986), 241-8; P. Murphy, 'Iron Age to Late Saxon land use in the Breckland', in M. Jones (ed.), *Integrating the subsistence economy* (Oxford, 1983), 177-210; 'The Anglo-Saxon landscape and rural economy: some results from sites in East Anglia and Essex', in O. Rackham (ed.), *Environment and economy in Anglo-Saxon England* (York, 1994), 23-39; M. Bell, 'Environmental archaeology as an index of continuity and change in the medieval landscape', in Aston et al. (eds.), *The rural settlements*, 269-86.

Some limited archaeological evidence supports the view taken from the moated sites that settlement in East Chilford was dispersed by 1200, and probably here we can be more confident in our early assertions in saying that settlement in this region had always been dispersed.[542] Scattered pottery distributed widely across the landscape suggests this, with a number of artefacts from the Iron Age.[543] The same wide distribution also goes for roman pottery and coins, not to mention the isolated remains of Roman villas and one of the finest burial sites in Britain.[544] Anglo-Saxon pottery is also scattered widely,[545] some Anglo-Saxon burial sites,[546] plus there is also the good fortune of having the precise location of an isolated Anglo-Saxon manor set within the thick woodlands at Yen Hall in the parish of West Wickham. We know its

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[542] In nearby Essex, it has even been shown that the pattern of dispersed settlement and irregular enclosures was apparent in the Roman period or possibly earlier. See T. Williamson, 'The Roman countryside: settlement and agriculture in N. W. Essex', *Britannia*, 15 (1984), 225-30; W. Rodwell, 'Relict landscapes in Essex', in H. Bowen & P. Fowler (eds.), *Early land allotment in the British Isles* (London, 1978), 89-98; O. Rackham, 'The medieval landscape of Essex', in D. Buckley (ed.), *Archaeology in Essex to AD 1500* (London, 1980), 103-7.

[543] See C. Parsons, 'A Romano-British site in Horseheath', *Proceedings of the Cambridge Antiquarian Society*, 31 (1931), 99-104; Haverhill & District Archaeological Group, 'A field survey of sites at Yen Hall, West Wickham, Cambs.', *Journal of the Haverhill & District Archaeological Group*, 6.1 (1995), 10; B. Charge, 'A field survey of Castle Camps, Cambs.', *Journal of the Haverhill & District Archaeological Group*, 6.3 (1997), 132-273; W. Powell (ed.), *The Victoria County History of Essex. Roman Essex*, iii (London, 1963), 42-3. Also some Paleolithic and Mesolithic finds have turned up, see L. Salzman (ed.), *VCH*, i (London, 1938), 253; J. Wymer (ed.), *Gazetteer of Mesolithic sites* (London, 1977), 135.

[544] H. Eckhardt et al., 'The Bartlow Hills in context', *Proceedings of the Cambridge Antiquarian Society*, 98 (2009), 47-64; H. Eckhardt, 'Roman barrows and their landscape context: a GIS case study at Bartlow', *Cambridgeshire Britannia*, 30 (2009), 65-98; Powell (ed.), *VCH Essex,* iii, 39-45; C. Brocklebank, 'The Bartlow Hills', *Journal of the British Archaeological Association*, 19 (1913), 249-54; T. Astin, H. Eckhardt & S. Hay, 'Resitivity imaging survey of the Roman Barrows at Bartlow, Cambridgeshire', *Archaeological Protection*, 14 (2007), 24-37; R. Neville, 'Investigations of Roman remains in the county of Essex', *Archaeological Journal*, 10 (1853), 14-21; F. Walker, 'Roman roads into Cambridge', *Proceedings of the Cambridge Antiquarian Society*, 14 (1910), 161-2; P. Dewhurst, 'Wool Street, Cambridgeshire', *Proceedings of the Cambridge Antiquarian Society*, 56-7 (1964), 42-60; A. Slater, 'Orchard House, Horseheath, Cambridgeshire: an archaeological evaluation' (unpublished report, CCRO, 2007); C. Fox, *The archaeology of the Cambridge region* (London, 1923), 185, 226, 231.

[545] D. Browne, C. Denston, M. Smith & M. Cra'ster, 'Archaeological notes', *Proceedings of the Cambridge Antiquarian Society*, 64 (1973), 28-9; B. Charge, 'Cropmark survey reports 1982-1983', *Journal of the Haverhill & District Archaeological Group*, 3.3 (1984), 141, 147.

[546] A. Boddington, 'Models of burial, settlement and worship: the final phase reviewed', in E. Southworth (ed.), *Anglo Saxon cemeteries: a reappraisal* (London, 1990), 177-99; T. Lethbridge, 'A cemetery at Shudy Camps, Cambridgeshire. Report of the excavation of a cemetery of the Christian Anglo-Saxon period in 1933', *CAS Quarto Publications*, 5 (1936); A. Meaney, *Gazetteer of early Anglo-Saxon burial sites* (London, 1964), 69.

location through the continued existence of a moat (first recorded in 1315 and likely a thirteenth century construction) and its date because of its appearance in a charter from 974 as the manor of Eanheale, which amounted to three hides granted by King Edgar to his thegn Elfhelm Polga.[547]

The only movement towards concentrated habitation in East Chilford before the thirteenth century was in the form of very small hamlets. As the Norman castle belonging to Aubrey de Vere (the Earl of Oxford) was constructed in the late eleventh or twelfth century, the Earl would have needed a close pool of labour to build the castle and dig the moat. [548] The small cluster of habitation was temporary, however, and probably uprooted when the castle fell into disrepair or when the Earl's signorial park became extended.[549] The Earls of Oxford were frequently a domineering presence in the region.[550] Thus, the tenants probably were shifted into the small informal clusters which appeared around greens at Camps Green and Olmstead.[551]

Thus, in sum, by the thirteenth century it is highly likely that a settlement divergence had appeared in Cambridgeshire: the Bourn Valley was characterised by concentrated villages while East Chilford contained small loosely-clustered hamlets and scattered farmsteads.

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[547] W. Birch (ed.), *Cartularium Saxonicum: a collection of charters relating to Anglo-Saxon history AD 948-975*, iii (London, 1964), 628-31. For background see Taylor, 'Medieval moats', 244; *Cambridgeshire landscape*, 51, 72, 90; S. Oosthuizen, 'The deserted medieval settlements of Cambridgeshire: a gazetteer', *Medieval Settlement Research Group Annual Report*, 24 (2009), 14-9; L. Salzman (ed.), *VCH*, ii (London, 1948), 43; P. Reaney, *The place-names of Cambridgeshire and the Isle of Ely* (London, 1943), 113; A. Wright (ed.), *VCH*, vi (London, 1978), 118.

[548] Taylor, 'Cambridgeshire earthworks surveys', 38-41.

[549] T. Way, *A study of the impact of imparkment on the social landscape of Cambridgeshire from c. 1080 to 1760* (Oxford, 1997), 64, 229. Entry and activities in the signorial park were punished; for example, see PRO, *Calendar of the Patent Rolls, 1281-1292, Edward I*, ii (London, 1893), 97; *Calendar of the Patent Rolls, 1313-1317, Edward II*, ii (London, 1898), 63.

[550] An example of the dominant presence of the De Vere family is shown by a series of complaints made by Lady Isabel Pauncefot who held a number of manors in the Chilford Hundred. Apparently, her claim was that the Earl of Oxford came to her home with bailiffs, 30 knights and 100 other men, who forced open her gate, broke into her cellar, drank her wine and beer, and beat her servants who were unwilling to reveal the whereabouts of their mistress. Events described in D. Roffe, 'The Hundred Rolls', <http://www.roffe.co.uk/rolls.htm>.

[551] Some habitation remained at Olmstead until the sixteenth century, after which it almost entirely disappeared. See Wright (ed.), *VCH*, vi, 36-7; ERO, D/D Q 1, no. 1.

4.2 Two paths towards late-medieval demographic and settlement decline

There are a number of sources which can be used to reconstruct demographic trends in medieval England between the eleventh and fourteenth centuries. At the same time, however, using these sources brings up an absolute minefield of methodological problems, which means we have to tread tentatively. Here the sources will be introduced with all their methodological limitations, with an elucidation of how they have been interpreted for trends in the Bourn Valley and East Chilford.

Demographic information can be taken from a number of manuscript sources for medieval England – four well-known ones were available for our two areas of Cambridgeshire including the Domesday Book of 1086, the Hundred Rolls of 1279/80, the lay subsidy of 1327, and the poll tax of 1377. The Domesday Book is England's first truly impressive survey of landholding across the whole of the country, carried out by William the Conqueror. The Hundred Rolls were similarly a central government inquiry into landholding, although only rolls for Eastern, Midland, and South-East England survive. It is likely that the whole of England was intended to be surveyed but the enormity of the administrative task meant that it was aborted mid-process.[552] Fortunately, the largest body of complete Hundred Roll returns comes from Cambridgeshire.[553] The lay subsidy and the poll tax are both fiscal documents; the subsidy represented a tax of a fifteenth on moveable goods, while the poll tax was assessed at a flat rate per capita of 4 denari.

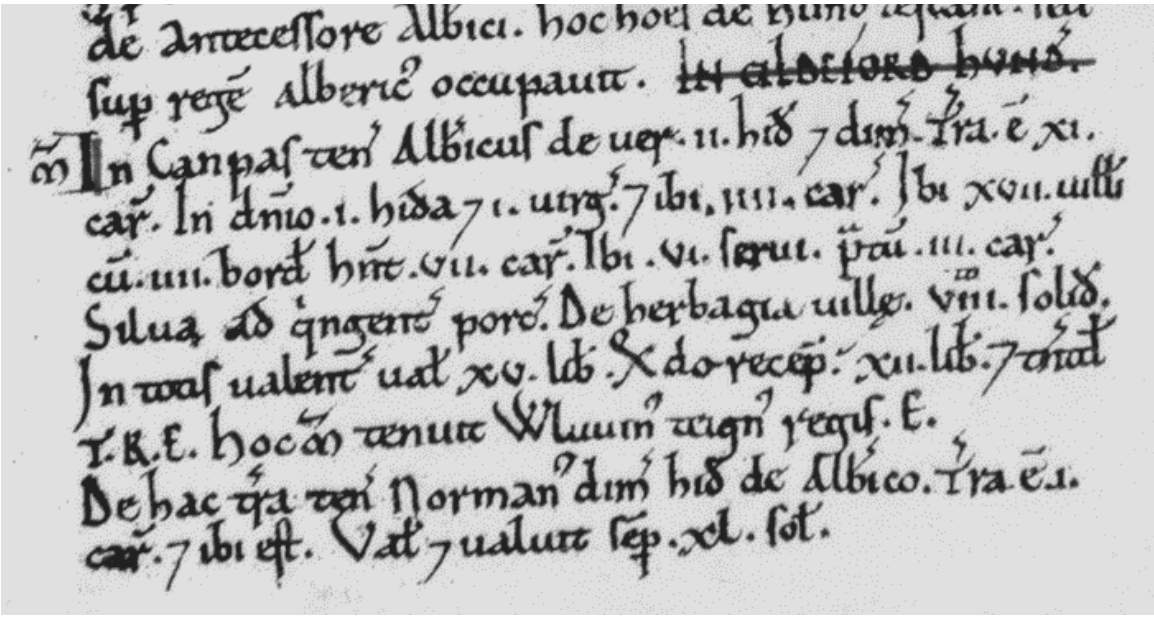
Extracting demographic information from these sources is not a simple process, however, and made trickier when data is assessed comparatively. First, a basic problem is that some of the sources list heads of household and not total population figures. The Domesday Book, the Hundred Rolls, and the lay subsidy of 1327 were all assessed at the tenant or household level, while the poll tax of 1377 was a tax on the whole of the adult population (14 or over). Thus, in order to create a comparative estimate of population for all the parishes, a multiplier has to be used. It

[552] See, S. Raban (ed.), *A second Domesday? The Hundred Rolls of 1279-80* (Oxford, 2004). Also, H. Cam, *The Hundred and the Hundred Rolls* (London, 1930); *Studies in the Hundred Rolls: some aspects of thirteenth-century administration* (Oxford, 1921).

[553] Approximately 60 percent of the pages of the Record Commission edition are devoted to the Cambridgeshire and Huntingdonshire circuit.

goes without saying that this methodology is full of problems, already well-discussed in the literature.[554]

Figure 4.4 Extract from the Domesday Book, 'Camps' (East Chilford)



Taken from: J. Palmer (ed.), 'Open Domesday',

Problems more specific to each of the sources also emerge, however. To begin with the Domesday Book, we cannot be sure in this landholding assessment how systematically settlements were recorded. For example, the book lists the number of tenants at 'Camps' (Shudy and Castle Camps – two parishes in East Chilford). Yet did this assessment also include Nosterfield, Olmstead, Camps Green, and Northo' too, which were all daughter settlements within the parish? We cannot be sure how rigorous the assessment of secondary settlements was which lay in proximity to the main vills.

Most of the key problems, however, regard the use of the Hundred Rolls. For other parts of England such as Warwickshire, attempts have been made to discern population trends by comparing data taken from the Domesday Book and the Hundred Rolls without properly taking on board the limitations of the Hundred Rolls.[555] The problem with simply counting the number of tenants in each parish in 1279 and then applying a multiplier in order to get a population total is that not every

[554] Often the multiplier has been seen to have inflated population totals, as discussed skilfully in M. McKintosh, *Autonomy and community: the royal manor of Havering, 1200-1500* (Cambridge, 1986), 126-30.

[555] J. Harley, 'Population trends and agricultural developments from the Warwickshire Hundred Rolls of 1279', *Economic History Review*, 11.1 (1958), 8-18.

landholder recorded in a parish lived in that parish.[556] Indeed, for the purposes of the Cambridgeshire cases, it was actually very common for landholders in the East Chilford parishes to hold land across numerous parish boundaries. In that case, the figure taken from simply a count of the tenants may be too high – thus over-emphasizing a population increase between the eleventh and thirteenth centuries and by the same token over-emphasizing late-medieval demographic decline when compared to the fourteenth century data.

Instead of counting tenants, there is the possibility of counting 'messuages' in the Hundred Rolls. Yet this too causes some consternation. For a start, there are some real doubts about the meaning of the term 'messuage'. Were all houses referred to as 'messuages', or were there other forms of habitation not considered 'messuages'? Basically we are not sure whether messuages recorded in the rolls really did represent the entirety of housing, and we are not sure how rigorous the compilers of the source were in recording habitations.

Further problems exist with the two fiscal sources from the fourteenth century. Indeed, the numbers of heads of household recorded in the lay subsidy of 1327 were likely far too low - a problem exacerbated when one considers that figures taken from the Hundred Rolls could easily be too high, which created a false perception of steep demographic decline. The number of fiscal paupers who were not taxed in the lay subsidy is unknown, but given the economic difficulties associated with the late thirteenth and early fourteenth centuries, it was probably high.[557] That is not to mention those who evaded taxation successfully, which could have been anything from 5 to 25 percent of the population.[558] For the poll tax figures from 1377 on the other hand, the problem lies with the fact that we are really unsure what proportion of the population was under 14 (and therefore not included in the assessment).[559] In effect, these fourteenth-century sources are too problematic to be

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[556] A point put forward in T. John, 'Population change in medieval Warwickshire: Domesday Book to the Hundred Rolls of 1279-80', *Local Population Studies*, 59 (1997), 41-53.

[557] C. Dyer, 'Were late medieval English villages 'self-contained'?', in *The self-contained village? The social history of rural communities 1250-1900* (Hatfield, 2007), 17.

[558] R. Smith, 'Demographic developments in rural England, 1300-48: a survey', in Campbell (ed.), *Before the Black Death*, 48. High levels of evasion of the lay subsidies has been argued in J. Hadwin, 'The medieval lay subsidies and economic history', *Economic History Review*, 36.2 (1983), 207; S. Rigby, 'Urban society in the fourteenth century: the evidence of the lay subsidies', *Bulletin of the John Rylands Library of Manchester*, 72.3 (1990), 169-84; P. Franklin, 'Gloucestershire's medieval taxpayers', *Local Population Studies*, 54 (1995), 22-5.

[559] C. Fenwick (ed.), 'Introduction', in *The poll taxes of 1377, 1379 and 1381*, i (Oxford, 1998), xxiii.

used for formulating total population figures,[560] but that does not mean they cannot be used to create a general insight into the relative sizes of settlements.[561]

So given these source limitations, how does this inform the methodology employed in this chapter? First of all, a basic point is that a multiplier of 4.5 will be used for all sources that work on the level of the tenant or head of household. Although in some senses this is arbitrary, any concerns are reduced by the fact that we are not looking for absolute population figures in the Bourn Valley and East Chilford – only comparative trends, with a particular focus on late-medieval decline. To negate the problem in the Hundred Rolls of landholders appearing many times in different parishes, a new method has been used. First of all, all the messuages are counted, because these are clearly dwellings of some description and represented a household. To this figure, were added some landholders without messuages, however, more care was made to not include landholders which appear in a number of parishes. In fact, of those landholders who appeared in multiple parishes, they were only recorded as resident in the parish where they had the most significant landholding. Although this methodology is by no means perfect, it is as cautious and considered as one is likely to get.[562] Of course, the careful examination of repeat names in the Hundred Rolls is possible in this comparative study because the areas of focus are small. Finally, in order to account for those who evaded the lay subsidy in 1327, 15 percent has been added to the figure (between the 5 to 25 percent estimates suggested by a host of other scholars). The results from this methodology appear below.

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[560] As asserted very negatively in J. Willard, *Parliamentary taxes on personal property 1290 to 1334* (Cambridge MA, 1934), 181; L. Salzman, 'Early taxation in Sussex', *Sussex Archaeological Collection*, 98 (1960), 40-3.

[561] As performed in J. Harley, 'The settlement geography of early medieval Warwickshire', *Transactions & Papers of the Institute of British Geographers*, 34 (1964), 115-30.

[562] The difficulty and problems with matching names in English medieval documents has been discussed in a long methodological debate connected with court rolls. See Z. Razi, 'The Toronto School's reconstitution of medieval peasant society: A critical view', *Past & Present*, 141 (1979), 143-4; J. Bennett, 'Spouses, siblings and surnames: Reconstructing families from medieval village court rolls', *The Journal of British Studies*, 23.1 (1983), 26-46; L. Poos & R. Smith, 'Legal windows onto historical populations? Recent research on demography and the manor court in medieval England,' *Law & History Review*, 2 (1984), 128-52; Z. Razi, 'The use of manorial court rolls in demographic analysis: A reconsideration', *Law & History Review*, 3 (1985), 191-200; L. Poos & R. Smith, 'Shades still on the window: A reply to Zvi Razi', *Law & History Review*, 4 (1985), 409-29; Z. Razi, 'The demographic transparency of manorial court rolls', *Law & History Review*, 5 (1987), 523-35. The late-thirteenth century was in particular a period of instability in surnames which could represent occupation, nickname, or kinship group; see P. Harvey, *A medieval Oxfordshire village, Cuxham, 1240 to 1400* (London, 1965), 126-7.

Table 4.2 Estimated population figures in the Bourn Valley and East Chilford, 1086-1377

	1086	**1279**	**1327**	**1377**
Castle Camps	122	374	217	113
Shudy Camps	99	383	145	141
Horseheath	131	297	135	121
Bartlow	n/a	144	68	32
West Wickham	149	225	259	108
East Chilford	**501**	**1423**	**824**	**515**
Barton	140	383	234	140
Harlton	90	257	202	103
Kingston	95	302	290	111
Eversden	117	207	280	148
Toft	104	225	151	76
Bourn Valley	**546**	**1374**	**1157**	**578**

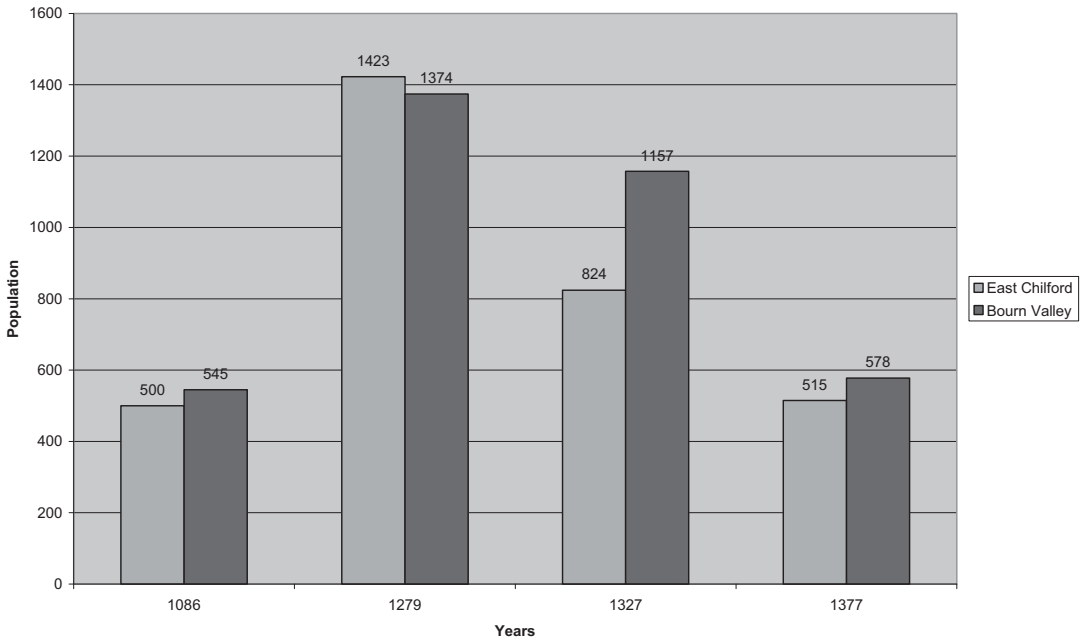
Sources: J. Otway-Ruthven, 'Translation of the text of Cambridgeshire Domesday', in Salzman (ed.), *VCH*, i, 358-99; J. Caley & W. Illingworth (eds.), *Rotuli Hundredorum*, ii (London, 1812-18), 420-30, 510-20, 562-4, 568-9; C. Evelyn-White (ed.), *Cambridgeshire and the Isle of Ely: lay subsidy for the year 1327: names of the taxpayers in every parish* (Cambridge, 1911); Fenwick (ed.), *Poll taxes*, iii, 71-2.

Table 4.3 Multipliers representing demographic trends in the Bourn Valley and East Chilford, 1086-1377

	1086-1279	**1279-1327**	**1327-1377**
East Chilford	2.84	(0.58)	(0.63)
Bourn Valley	2.52	(0.84)	(0.5)

Sources: as above

Figure 4.5 Overview of demographic trends in the Bourn Valley and East Chilford, 1086-1377



Sources: as above

To summarise the results presented above, it is clear that both the Bourn Valley and East Chilford experienced significant population growth between the eleventh and thirteenth centuries. The ratios of 2.84 and 2.52 seem entirely in line with what was expected given what is known about the medieval demographic development of Cambridgeshire, England, and Western Europe in general. It has long been suggested that population increased in England between the Domesday Book and the Hundred Rolls by around two and a half times.[563] Furthermore, it has been said that Cambridgeshire had one of the most densely settled landscapes of the twelfth and thirteenth centuries.[564] The trend of focus for this chapter, however, is the levels of late-medieval demographic decline experienced in both areas. Population in East Chilford seems to have significantly retracted well before the Black Death, between 1279 and 1327. In fact, this population decline was higher than the rate between 1327 and 1377; a period containing the Black Death. These figures for early demographic decline in East Chilford are supported by evidence for contracting settlement and cultivation. Indeed, it was said for the Camps Manor in Castle Camps

[563] M. Postan, 'Medieval agrarian society in its prime: England', in *The Cambridge Economic History of Europe*, i (Cambridge, 1966), 561-3; J. Russell, *British medieval population* (Albuquerque, 1948), 80.
[564] E. Miller & J. Hatcher, *Medieval England: rural society and economic change, 1086-1348* (London, 1978), 144.

that the grain yield there had declined by two-thirds between 1291 and 1340, while in the same period in Bartlow, Shudy Camps, and Horseheath, a combined 81 hectares had gone out of cultivation.[565] In fact, Chilford Hundred contained vills with some of the highest proportions of land going uncultivated in the first half of the fourteenth century in Cambridgeshire.[566] In contrast, the population of the Bourn Valley did not fall so sharply between 1279 and 1327, but between 1327 and 1377 lost half of its total inhabitants. The question pursued in the following sections is why the difference in the paths towards late-medieval demographic decline?

4.3 Late-medieval change and continuity: demesne farming and demesne fragmentation

It is argued in this chapter that the early retraction in settlement in East Chilford was linked to the early changes made to the social and economic structures there. In contrast the Bourn Valley showed continuity in many of the same structures throughout the late Middle Ages. As early as the second half of the thirteenth century, direct demesne agriculture through manors was on the wane in East Chilford. Demesnes began to be sold or leased out piecemeal to tenants. In the fourteenth century this process intensified as larger units or even whole demesnes were offered to successful tenants and low-level gentry through sale or leasehold. In East Chilford this contributed to the consolidation of new agricultural units, often centred on isolated moated farmhouses in the thirteenth and fourteenth centuries. In contrast, the open-field system and direct demesne agriculture exploited through manors lingered on into the fifteenth century in some cases in the Bourn Valley, in line with what can be expected across large parts of lowland England.[567] In this section, this

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[565] TNA, C 135/28/17, no. 8; C 135/222, no. 15; G. Vanderzee (ed.), *Nonarum Inquisitiones in Curia Scaccarii* (London, 1807), 213-15.

[566] A. Baker, 'Evidence in the 'Nonarum Inquistiones' of contracting arable lands in England during the early fourteenth century', *Economic History Review*, 19.3 (1966), 525-6.

[567] In many areas of lowland England, demesne agriculture continued till around 1400 though in not many places did it continue far into the fifteenth century. B. Campbell, *English seigniorial agriculture, 1250-1450* (Cambridge, 2002), 28-9. See the section on the 'Indian Summer' of demesne farming in D. Stone, *Decision-making in medieval agriculture* (Oxford, 2005), 80-120. Examples of demesne agriculture continuing after the Black Death in England are numerous, for example see G. Holmes, *The estates of the higher nobility in fourteenth-century England* (Cambridge, 1957), 114-5; M. Mate, 'Agrarian economy after the Black Death: the manors of Canterbury Cathedral Priory, 1348-91', *Economic History Review*, 37 (1984), 341, 344-9; C. Dyer, *Lords and peasants in a changing society: the estates of the Bishopric of Worcester, 680-1540* (Cambridge, 1980), 121-49; M. Bailey, *A marginal*

contrast between the two areas of Cambridgeshire is explained. In the next section (5.4), we learn why this was so important, and how this affected the different extents and timing of settlement and demographic decline in the late Middle Ages.

In East Chilford, manorial demesnes began to be leased out in the late thirteenth century, and it was a process which intensified through the fourteenth century as economic conditions worsened for large landowners such as manorial lords.[568] In West Wickham, the lord Emery Peche exploited his manor through leasehold from the late 1200s. It comprised 144 hectares of arable in 1280 and yet was supported by only one customary tenant to work the demesne. It sold its last villein to a St Albans man with no land or connections in the parish in 1304.[569] That the lord in 1327, John Bernham, was assessed at a paltry 12d in the lay subsidy suggests considerable economic misfortune occurred in the early fourteenth century, or direct operations within the manor were completely downsized.[570] By the end of the fourteenth century the whole demesne was at lease.[571] The manors of Enhale, Streetly and Le Hayes all reduced their demesnes and focused less on direct management by the late thirteenth century. The ancient manor of Enhale had 130 hectares of arable in 1280, yet by 1320, 99 hectares of this was alienated between 13 people.[572] By 1338 only 73 hectares remained in demesne.[573] La Hayes Manor had 144 hectares demesne in 1280 but was entirely leased out by 1366.[574] The lord of the

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economy? East Anglian Breckland in the later Middle Ages (Cambridge, 1989), 232-4, Hilton, *Leicestershire estates*.

[568] The same chronology seen elsewhere in England, often beginning with piecemeal leasing and later the leasing out of whole demesnes en-bloc. See C. Dyer, *An age of transition? Economy and society in England in the later Middle Ages* (Oxford, 2005), 195; R. Lomas, 'The Priory of Durham and its demesnes in the fourteenth and fifteenth centuries', *Economic History Review*, 31 (1978), 341, 345; Miller & Hatcher, *Medieval England*, 236; R. Britnell, *The Winchester pipe rolls and medieval English society* (Woodbridge, 2003), 32; F. Du Boulay, 'Who were farming the English demesnes at the end of the Middle Ages?', *Economic History Review*, 17 (1964-5), 443-55; M. Mate, 'The farming out of manors: a new look at the evidence from Canterbury Cathedral Priory', *Journal of Medieval History*, 9 (1983), 331-44; E. Searle, *Lordship and community: Battle Abbey and its Banlieu, 1066-1538* (Toronto, 1974), 257-66; I. Keil, 'Farming on the Dorset estates of Glastonbury Abbey in the fourteenth century', *Proceedings of the Dorset Natural History & Archaeological Society*, 87 (1965), 234-50; B. Harvey, 'The leasing of the abbot of Westminster's demesnes in the later Middle Ages', *Economic History Review*, 22 (1969), 17-27.

[569] BL, Add. MS. no. 5823, fos 58v, 102v.

[570] Evelyn-White (ed.), *Lay subsidy 1327*, 26.

[571] BL, Add. MS. no. 5823, fo. 102v.

[572] TNA, CP 40/236, nos. 52d, 301d.

[573] TNA, C 135/54/9.

[574] BL, Add. MS. no. 5823, fos 57v, 232v.

manor, Stephen de la Hayes, also had his estate in Horseheath sub-infeudated by the time of the Hundred Rolls and divided up between Geoffrey of Horseheath, Nicholas son of Adam Mersey and Waltham Abbey in Essex.[575] Streetly Manor in West Wickham retained some customary labour services into the fourteenth century although the Hundred Rolls showed that the land held by its customary tenants was minimal (5 hectares) and by the end of the fourteenth century this manor was leased out in its entirety too.[576] The same trend of disintegrating demesnes can be observed in Castle Camps. The large demesne of Camps Manor held by the Earl of Oxford showed earlier signs of fragmentation. An Inquisition Post Mortem of 1262-3 revealed that the arable amounted to 300 hectares, yet that had shrunk to 243 in 1331 and to 219 hectares in 1371.[577] The value of the manor declined from 100 marks in 1315 to 15 pounds in 1371.[578] Although the Camps Manor demesne was still partly directly farmed in 1371, by 1432 it was totally leased out to William Peyt.[579] The Prior of Ely had a manor at the small hamlet of Northo in the thirteenth century (and probably twelfth century), but by the time of the Hundred Rolls this had already been divided up between 16 free tenants.[580] It may have represented a sort of collective tenancy seen elsewhere in England over former manorial demesnes.[581] Thus, the late-medieval retraction in settlement and cultivation in East Chilford between 1279 and 1327 occurred simultaneous to great economic changes there.

The same process did not occur in the Bourn Valley. Manorial lords here were unrelenting in their direct exploitation of their lands, which even continued long after the disastrous effects of the Black Death. In Eversden, Robert Hoo managed the largest demesne farm in the parish by retaining heavy labour services in the late thirteenth century sufficient for the cultivation of the demesne, and by the end of the fourteenth century Eversden Manor was still being farmed directly.[582] A rental from 1382 and a court roll from 1385 reveal that even at these late dates, tenants still owed some labour services.[583] We also know about the lingering demesne management

[575] Caley & Illingworth (eds.) *RH*, ii, 421.

[576] TNA, C 133/94/5, no. 3; BL, Add. MS. no. 5823, fo. 107v.

[577] E. Kosminsky, *Studies in the agrarian history of England in the 13th Century* (Oxford, 1956), 97; TNA, C 135/28/17, no. 8; C 135/222, no.15.

[578] TNA, C 143/118/4; C 135/222, no.15.

[579] BL, Add. MS. no. 5861, fo. 91v.

[580] Caley & Illingworth (eds.), *RH*, ii, 428.

[581] See R. Hoyt, 'Farm of the manor and community of the vill in Domesday Book', *Speculum*, 30 (1955), 147-69; Hallam (ed.), *Agrarian history*, ii, 674.

[582] Caley & Illingworth (eds.), *RH*, ii, 510-1; TNA, *Calendar of Inquisitions Miscellaneous, Chancery AD 1392-1399* vi, (London, 1963), 97-8.

[583] CUL, QC, 15, no. 67; CUL, QC, 11, 10th Jan 1985.

here from a number of presentments made by leading villages through the courts against the mismanagement of the demesnes by bailiffs between 1385 and 1398, supporting the view that by end of the fourteenth century it had become very difficult to find qualified demesne managers.[584] Elsewhere in Harlton, the lord of the largest manor in the parish enlarged and consolidated the demesne rather than leasing pieces out in the fourteenth century. The Hundred Rolls show the manor was fragmented in 1280, as lower-gentry or local tenants held moderate estates of Lady Isabel Paunton. By the early fourteenth century however, the Harlton Manor was extending its demesne and growing at the expense of other holdings in the parish. Ludes Manor passed into the same ownership as Harlton Manor by 1388 and two other manors joined in the fifteenth century.[585] The same manor could still be identified in 1524 as one large demesne farm with a wealthy aristocratic owner.[586] The two largest manors in Kingston in 1280, Kingston Wood and Kingston St George, also were directly farmed through the fourteenth century. In 1280 both manors had at least some villeins to provide customary labour services, but interestingly also had three influential 'free' tenants who owed a few days ploughing in addition to their money rent.[587] Between 1280 and 1355 the Kingston Wood demesne increased by 12 hectares, owning largely to the consolidation of some demesne pasture and meadow.[588] As late as the sixteenth century the Kingston Wood demesnes were kept in hand by an aristocratic family, the Chamberlains, enlarged and consolidated further by uniting their lands with Kingston St George Manor and Depdens Manor, an estate that originated from land consolidation by local tenant Geoffrey of Soham in the thirteenth century.[589] Demesnes of the two principle manors at Toft were kept in hand during the fourteenth and fifteenth centuries and showed a marginal increase in area; for example, the land of Leventhorpe's Manor went from 24 hectares in 1280 to 32 hectares in 1355.[590]

In the late Middle Ages, the Bourn Valley was a model of continuity in its modes of economic exploitation, while East Chilford underwent great economic

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584 C. Briggs, 'Monitoring demesne managers through the manor court before and after the Black Death', in Goddard et al. (eds.), *Survival and discord*, 190-4; Stone, *Decision-making*, 216-23.

585 W. Illingworth (ed.), *Placitorum in domo capitulari Westmonasteriensi asservatorum abbreviatio* (London, 1811), 217-9.

586 TNA, E 179/81/130, fo. 4.

587 Caley & Illingworth (eds.) *RH*, ii, 514.

588 TNA, C 135/137/3.

589 TNA, C 142/63/33; E 150/74/4; C 142/170/12; CP 25(2)/93/835; BL, Add. Ch. 44797.

590 Caley & Illingworth (eds.) *RH*, ii, 519-20; TNA, *IPM AD 1352-1361*, x (London, 1921), 393; Salzman (ed.), *VCH,* ii, 71.

changes and a shift towards indirect exploitation from the second half of the thirteenth century. What then, were the causal connections between these different cases of continuity and change in economic exploitation, and the different paths towards late-medieval population decline in the two areas?

4.4 The causes of divergent demographic and settlement development in the late Middle Ages

Both East Chilford and the Bourn Valley experienced settlement decline and a retraction in the cultivated area in the late Middle Ages. East Chilford, however, had its steeper decline earlier, and significantly, before the Black Death. The Bourn Valley did not decline so much between 1279 and 1327, though suffered a more severe contraction later in the fourteenth century. Why was this?

A: Economic polarisation

First of all, the earlier decline of manorialism and the fragmentation of demesnes in East Chilford inadvertently led to an earlier development of social and economic polarisation than seen in the Bourn Valley. While a select group of tenant farmers thrived under these conditions, a wider group of peasants became impoverished and either had to migrate away in search of new opportunities or struggled to meet subsistence levels and perished under the difficult economic conditions. The manorial demesnes that were sold, leased or alienated in the thirteenth and fourteenth centuries came into the hands of the lower gentry or tenants with improving economic fortunes. Already by 1327, wealthy tenants were being assessed at higher subsidies for movable assets than manorial lords, and these well-to-do free tenants were beginning to dominate positions within the Cambridgeshire juries.[591] They consolidated land into coherent units around their isolated farmhouses, and their moats visibly expressed their heightened social and economic status. A perfect example was the Sewale family of West Wickham, who can be traced in the twelfth

[591] Evelyn-White (ed.), *Lay subsidy 1327*, 25-7. Although it is difficult to know what 'taxable wealth' meant to the subsidy assessors. See K. Biddick, 'Missing links: taxable wealth, markets, and stratification among medieval English peasants', *Journal of Interdisciplinary History*, 18.2 (1987), 281. Some caution is argued for the tax assessment system in R. Schofield, 'The geographical distribution of wealth in England, 1334-1649', *Economic History Review*, 18 (1965), 483-510. For Cambridgeshrie juries being filled by these upwardly mobile men, see L. Scales, 'The Cambridgeshire Ragman Rolls', *English Historical Review*, 113 (1998), 560. Also, K. Asaji, 'The Baron's War and the Hundred jurors in Cambridgeshire', *Journal of Medieval History*, 21 (1995), 153-65.

and thirteenth centuries as local tenants.[592] By the time of the Hundred Rolls John Sewale had compiled 12 hectares which he held of Emery Peche, lord of Bernhams Manor.[593] He continued to purchase land which ended up in the hands of his heir, John, who by 1315 held over 41 hectares.[594] The high status of his farmhouse is indicated by the fact that in 1322 he granted his sister Margery, a solar attached to his hall with a granary, bakery and stables.[595] The farmhouse was positioned in the little hamlet of West Wickham and was moated.[596] The later occupant Thomas Sewale was recorded as occupying Bernhams Manor in 1361, which suggests (given the thirteenth century links with Emery Peche) that the farmhouse and consolidated lands of the Sewales were created by acquiring land from the demesne of Bernhams Manor.[597] Their moated farmhouse was either the former manor house associated with Bernhams or newly constructed on the sub-division of previous demesne land.

William Berardshay was another good example. In 1280 he held 32 hectares in West Wickham, which were subinfeudated from an estate of the Earl of Oxford.[598] Subinfeudation was one of the results of the Norman Conquest in England, and was the process by which a social superior would grant away land to 'followers' or vassals, lay or ecclesiastical.[599] Such layers of patronage were the foundations behind the whole feudal system.[600] William consolidated land to create a coherent unit around his moated residence in Shudy Camps on the site now known as 'Barsey's Farm'. Over 20 hectares had been acquired there by 1280, all held of different owners for large cash rents.[601] William continued to build his landholding around his isolated farmhouse in Shudy Camps and in 1296 purchased 36 hectares from Robert de Say,

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592 BL, Add. MS. no. 5823, fos 58r, 229r, 231v-232v; Illingworth (ed.), *Placitorumin*, 148.

593 CUL, QC, 52/9; Caley & Illingworth (eds.) *RH*, ii, 569.

594 BL, Add. MS. no. 5823, fos 94, 102-3, 229-31v; CUL, QC, 52/22; TNA, CP 25(1)/27/57, no. 7.

595 BL, Add. MS, no. 5823, fo. 230v.

596 Charge, 'Crop mark survey', 141, 148.

597 *IPM*, x, 530. Thomas Sewale also had lands in parishes further north, such as West Wratting. See Wright (ed.), *VCH*, vi, 193-4.

598 Caley & Illingworth (eds.) *RH*, ii, 569.

599 H. Thomas, 'Subinfeudation and alienation of land, economic development, and the wealth of nobles on the Honor of Richmond', *Albion*, 26 (1994), 397. The reasons for granting land in this way may have been to make payment for past or future services (often military) though by the twelfth and thirteenth centuries these active services basically disappeared, see J. Bean, *The decline of English feudalism, 1215-1540* (Manchester, 1968), 3-4; S. Harvey, 'The knight and the knight's fee', *Past & Present*, 49 (1970), 5-9.

600 The classic work probably being F. Maitland & F. Pollock (eds.), *The history of English law before the time of Edward I* (2 vols, Cambridge, [red.] 1968).

601 Caley & Illingworth (eds.) *RH*, ii, 428-9.

an aristocratic landowner who held a vast estate in the locality.[602] From very humble origins based on the acquisitive tendencies of a local tenant, the farm and landholding grew in the fourteenth and fifteenth centuries to comprise a manor known as 'Berardsheys'.[603] Elsewhere William le Harper held 34 hectares across four parishes in 1280 and from numerous different owners, though it is likely that he resided in Shudy Camps given that he was assessed there for 3s. in the 1327 lay subsidy.[604] The *VCH* suggests that by the early fourteenth century he had bought the fee of 43 hectares which in 1280 had belonged to John de Mimiac, held of the Earl of Oxford.[605] William le Harper built up his landholding in the Nosterfield area of Shudy Camps in the late thirteenth and early fourteenth centuries and his residence was one of the many moats in the area. William also acquired land in Horseheath based around two moats located at Cardinal's Farm, which was formerly a fee held by Robert de Plessy in 1280.[606] When he died in 1347 he passed on an estate of 53 hectares to Richard son of Henry of Wykes, showing how he had built up great landholdings from meagre beginnings.[607]

The increasing social and economic mobility seen in East Chilford from the second half of the thirteenth century came at a cost however. As successful tenants consolidated landholding through the opportunities presented through demesne fragmentation or assarting, a substantial group of less fortunate peasants emerged. The destitute were essentially squeezed out.[608] While property distribution received a score of 59 on the Gini-index for the Bourn Valley in 1279, in East Chilford it was 70 (0 is equal to a totally egalitarian society, 100 a totally inequitable society). Fifty-three percent of the tenants in East Chilford in 1279 had less than two hectares of land, compared to 43 percent in the Bourn Valley. As one might expect, East Chilford accordingly had twice as many landholders with 40 hectares or more to their name than in the Bourn Valley. The strong fragmentation of landholding into tiny morsels is not entirely surprising given the 1290s in particular have been described as a period where smallholder impoverishment was highly pronounced.[609] This disparity

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[602] TNA, CP 25(1)/26/43, no. 31; BL, Add. MS. no. 5823, fo. 252.

[603] TNA, CP 25(2)/51/270, no. 2.

[604] Caley & Illingworth (eds.) *RH*, ii, 420-9, 569; Evelyn-White (ed.), *Lay subsidy*, 26.

[605] Wright (ed.), *VCH,* vi, 52.

[606] BL, Add. MS, no. 5823, fo. 250.

[607] TNA, CP 25(1)/28/67, no. 21; E 179/242/8, fo. 5.

[608] P. Goldberg, *Medieval England: A social history, 1250-1550* (London, 2004), 158-60.

[609] M. Bailey, 'Peasant welfare in England, 1290-1348', *Economic History Review*, 51.2 (1998), 223-51; Z. Razi, *Life, marriage, and death in a medieval parish: economy, society, and demography in Halesowen, 1270-1400* (Cambridge, 1980), 28-32; P. Schofield, 'Dearth, debt and the local land market

would simply have increased into the fourteenth century as land consolidation became even more intensified in East Chilford. Partible inheritance practices only pushed fragmentation of smallholdings further, as noted in other parts of East Anglia.[610] Those 53 percent of peasants which had less than 2 hectares would not have been able to survive (apparently six hectares was the minimum a peasant family in England could have maintained subsistence on without outside activities)[611] without recourse to other economic exploits, such as proto-industry or wage labour. Certainly there is no sign of proto-industry in the region, and with regard to wage labour, we are left to guess at its significance in the absence of good sources.

Land consolidation and economic polarisation was made worse by the beginnings of encroachment onto the peasants' common pastures, which comprised, for example, of the 24 hectares in the eastern corner of the parish of West Wickham (known as 'The Shrubs') which linked up with 40 hectares of common grazing to the north around the green at Weston Colville.[612] Indeed, free tenants actually resisted and sued Lord William de Colville for depriving them of their common pasture with his encroachment into the heaths.[613] Thus by the late thirteenth century, in the context of economic polarisation in the distribution of land, the loss of the commons, and the lack of alternative employment, it is entirely unsurprising that impoverished inhabitants sought pastures new or perhaps even perished. Depressed and dysfunctional settlements have been highlighted for other parts of late-medieval England, with reports of tenants leaving and buildings falling into ruin.[614] Thus, the decline of the manorial system, the lack of oppressive jurisdictions and obligations, and widespread rejection of servile identity (see the high numbers of molmen at

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in a late thirteenth century village community', *Agricultural History Review*, 45 (1997), 3-5; R. Smith, 'A periodic market and its impact upon a manorial community: Botesdale and the manor of Redgrave, 1280-1300", in Z. Razi & R. Smith (eds.), *Medieval society and the manor court* (Oxford, 1996), 466-7.

[610] For example, see Z. Razi, 'The myth of the immutable English family', *Past & Present*, 140 (1993), 15-8.

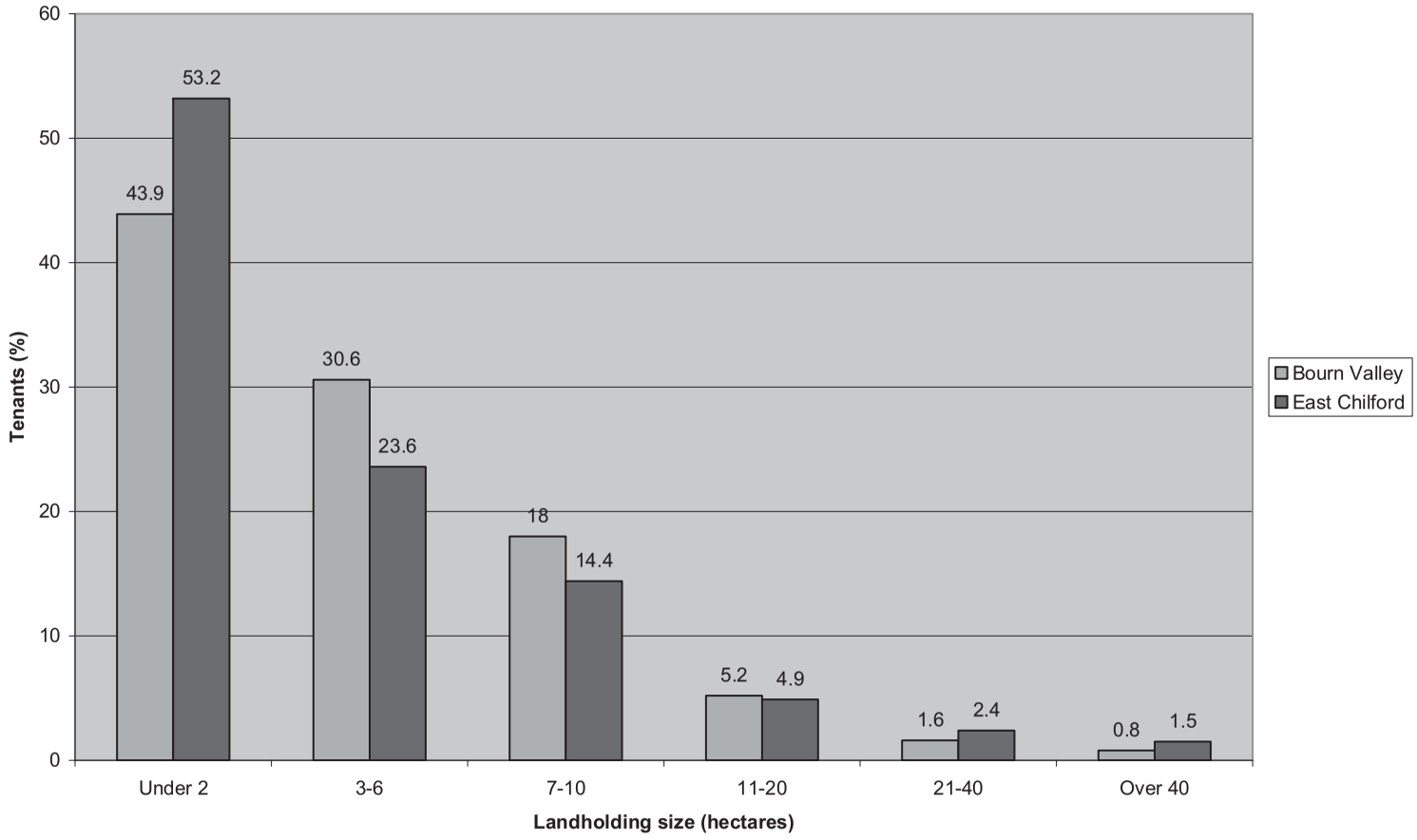
[611] Titow, *English rural society, 1220-1350*, 89-90; R. Hilton, *A medieval society: the West Midlands at the end of the thirteenth century* (Cambridge, 1983 [1966]), 121-3; M. Postan, *The medieval economy and society: an economic history of Britain 1100-1500* (London, 1972), 132-4.

[612] Caley & Illingworth (eds.), *RH*, ii, 569; CUL, QC, 52, no. 101; CUL, Add. MS. 6081, fos 2v, 24v; Wright (ed.), *VCH*, vi, 185-7.

[613] PRO (ed.), *Curia Regis rolls*, vii (London, 1935), 286.

[614] T. Lloyd, 'Some documentary sidelights on the deserted Oxfordshire village of Brookend', *Oxoniensia*, 29/30 (1964-5), 116-28.

Figure 4.6 Sizes of landholding for tenants in the Bourn Valley and East Chilford, 1279



Source: Caley & Illingworth (eds.), *RH*, ii, 420-30, 510-20, 562-4, 568-9.

Castle Camps – former customary tenants who had their extra-economic duties commuted to cash rents)[615] meant that restrictions would have been small on those looking to escape the poor conditions seen in East Chilford at the end of the thirteenth century.[616]

B: Large landholdings, labour, and arable or pastoral farming

A second reason for the contrasting timing of the demographic and settlement contraction in the two areas of Cambridgeshire was likely linked to the differences the Bourn Valley and East Chilford displayed with regard to their balance between the size of the demesnes (or large farms), the availability and type of labour present, and the decision to move to predominantly arable or pastoral farming.

On the surface, property and tenurial structures in both areas were quite similar in the late Middle Ages. The value of the Hundred Rolls lies in the information provided on smaller lay landlords who rarely left archives of their own.[617] Thus it is possible to see that in both areas there existed a high complexity of manorial structure and complicated networks of tenurial relationships.[618] Manors were small and numerous, conforming to Kosminsky's notion of the 'sub-manor' which 'properly speaking cannot be called manors at all'.[619] In fact there was very little demarcation between the manorial free tenants who had considerable property, made up lands held from several different lords with tenants of their own, and the manorial lords whose manors sometimes included lands held of other landlords on

[615] Caley & Illingworth (eds.) *RH,* ii, 425. On molmen, see P. Vinogradoff, *Villainage in England: essays in English mediaeval history* (Cambridge, 2010, [1892]), 185.

[616] A highly migratory society based on short-distance movement to other rural areas as argued for nearby Essex in L. Poos, *A rural society after the Black Death: Essex 1350-1525* (Cambridge, 1991), 159-79

[617] Kosminsky, *Studies*, 97; B. Campbell, 'The agrarian problem in the early 14th century', *Past & Present*, 188 (2005), 25. See also Raban (ed.), *A second Domesday?*, 6; M. Barg, 'The social structure of manorial freeholders: an analysis of the Hundred Rolls of 1279', *Agricultural History Review*, 39 (1991), 109.

[618] As found in Norfolk in B. Campbell, 'The complexity of manorial structure in medieval Norfolk: a case study', *Norfolk Archaeology*, 39 (1986), 225-61. Recognised explicitly for Cambridgeshire in E. Kosminsky, 'Services and money rents in the thirteenth century', *Economic History Review*, 5.2 (1935), 30.

[619] E. Kosminsky, 'The Hundred Rolls of 1279-80 as a source for English agrarian history', *Economic History Review*, 3.1 (1931-2), 23.

temporary lease or permanent tenure.[620] The *Nomina Villarum* of 1316 showed five manorial lords in Barton in the Bourn Valley, and four manorial lords in West Wickham in East Chilford, to illustrate this point.[621]

In both the Bourn Valley and East Chilford tenants held lands from numerous lords. For example, William Jake of Eversden in 1280 held 22 hectares from 11 different landlords of various rents, including a tiny 8 hectare 'demesne' which was held as a quarter of a knight's fee and had been sub-infeudated through five different hierarchies of men.[622] From very meagre origins he had constructed himself a moated dwelling on one side of the High Street, and on the other side had carefully laid out plots of land for his own tenants – aping the style of the greater signorial lords. He had worked his way up as one of the '*coqs de village*', for he was included as one of the recurrent witnesses to local land transactions.[623] A similar situation can be discerned from East Chilford, for example, William le Harper held 34 hectares from 13 different landlords scattered across four different parishes in 1280, and later came to take control of the 32 hectare manor formerly belonging to Robert de Plessy.[624]

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[620] The difficulties of defining manors is a theme addressed in M. Postan, 'The manor in the Hundred Rolls', *Economic History Review*, 3 (1950), 119-25; M. Bailey (ed.), *The English manor, c. 1200-1500: selected sources translated and annotated* (Manchester, 2002), 1-17.

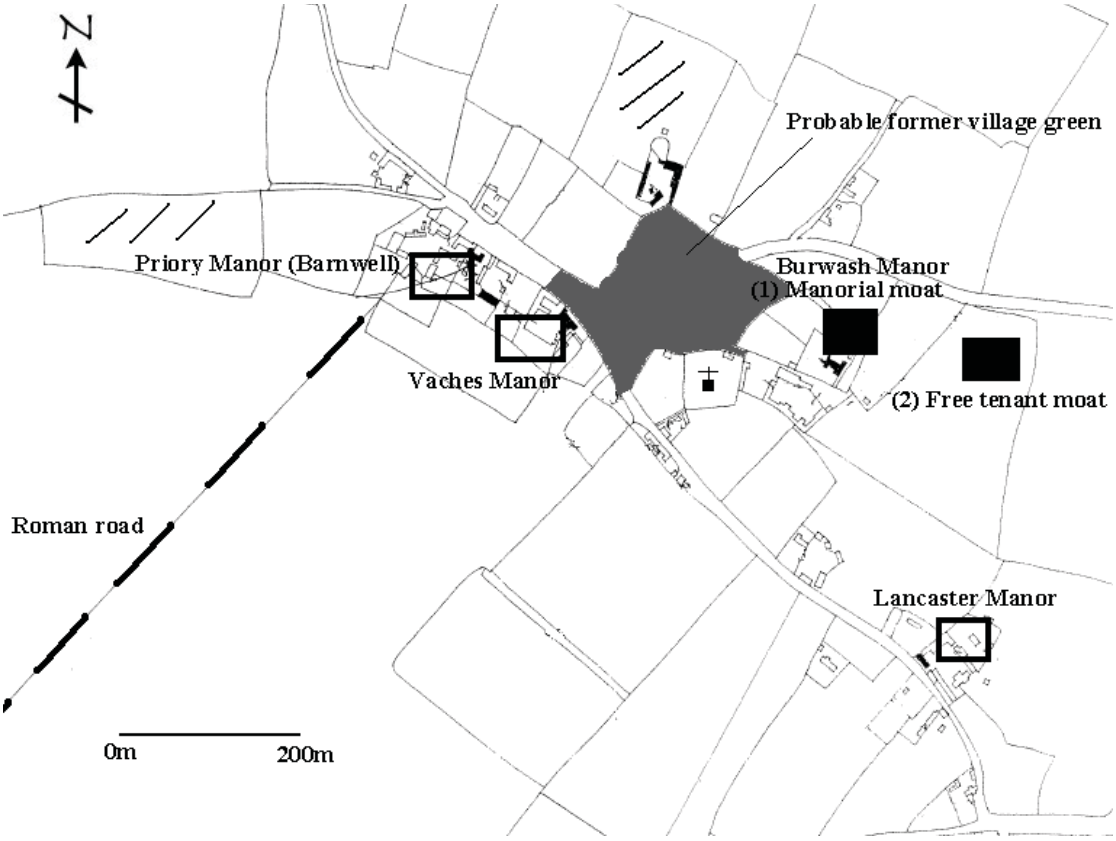
[621] TNA, 'Nomina Villarum: Comitatus Cantebrigie', in *Inquisitions and assessments relating to feudal aids with other analogous documents preserved in the Public Record Office: 1284-1431*, i (London, 1899), 152-7.

[622] Caley & Illingworth (eds.) *RH,* ii, 511-2.

[623] For example, in 1275, see CRO, 588/T124.

[624] Caley & Illingworth (eds.) *RH,* ii, 420-7, 569; BL, Add. MS, no. 5823, fo. 250.

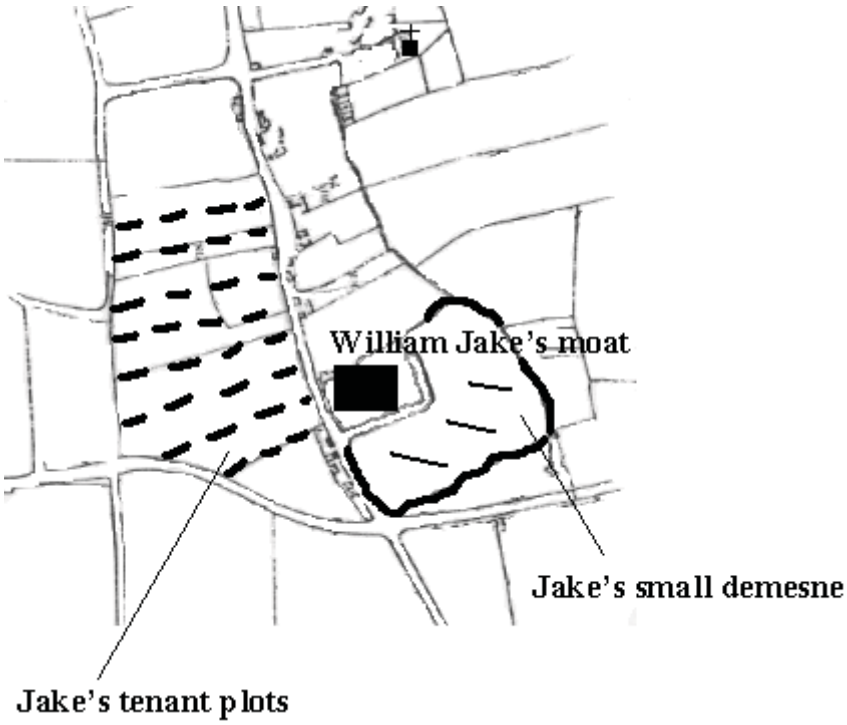
Figure 4.7 Manorial fragmentation in Barton in the late thirteenth century[625]



Adapted version of 1841 tithe map: CRO, P 10/27/1.

[625] Additions made with the help of Oosthuizen, 'New light'; A. Taylor & J. Heap, 'Correspondence regarding a visit to a moated site at University Farm' (unpublished document, Cambridge Record Office, 1982). Black cross-hatching is ridge and furrow crop marks.

Figure 4.8 William Jake, his moat and tenant plots in Little Eversden, 1279[626]



Adapted version of 1811 enclosure map: CRO, Q/RDc no. 19.

There were important differences between the two areas however, which eventually led to a better balance between the demands on labour and the availability of labour in the Bourn Valley between the late thirteenth and first half of the fourteenth century. The differences lay in the composition of the demesnes and large farms. Although in both areas manors were numerous, complex, and small, the average size of manors was much smaller in the Bourn Valley. In East Chilford manors averaged 83 hectares each (still not large) while in the Bourn Valley they were just 49 hectares on average.

In East Chilford manorial demesne occupied around 40 percent of the total land, almost double the proportion of demesne found in the Bourn Valley in 1280. The total demesne recorded for all the regions covered in the Hundred Rolls accounted for between 25 and 33 percent of total land, thus East Chilford was well above this average and the Bourn Valley well below.[627]

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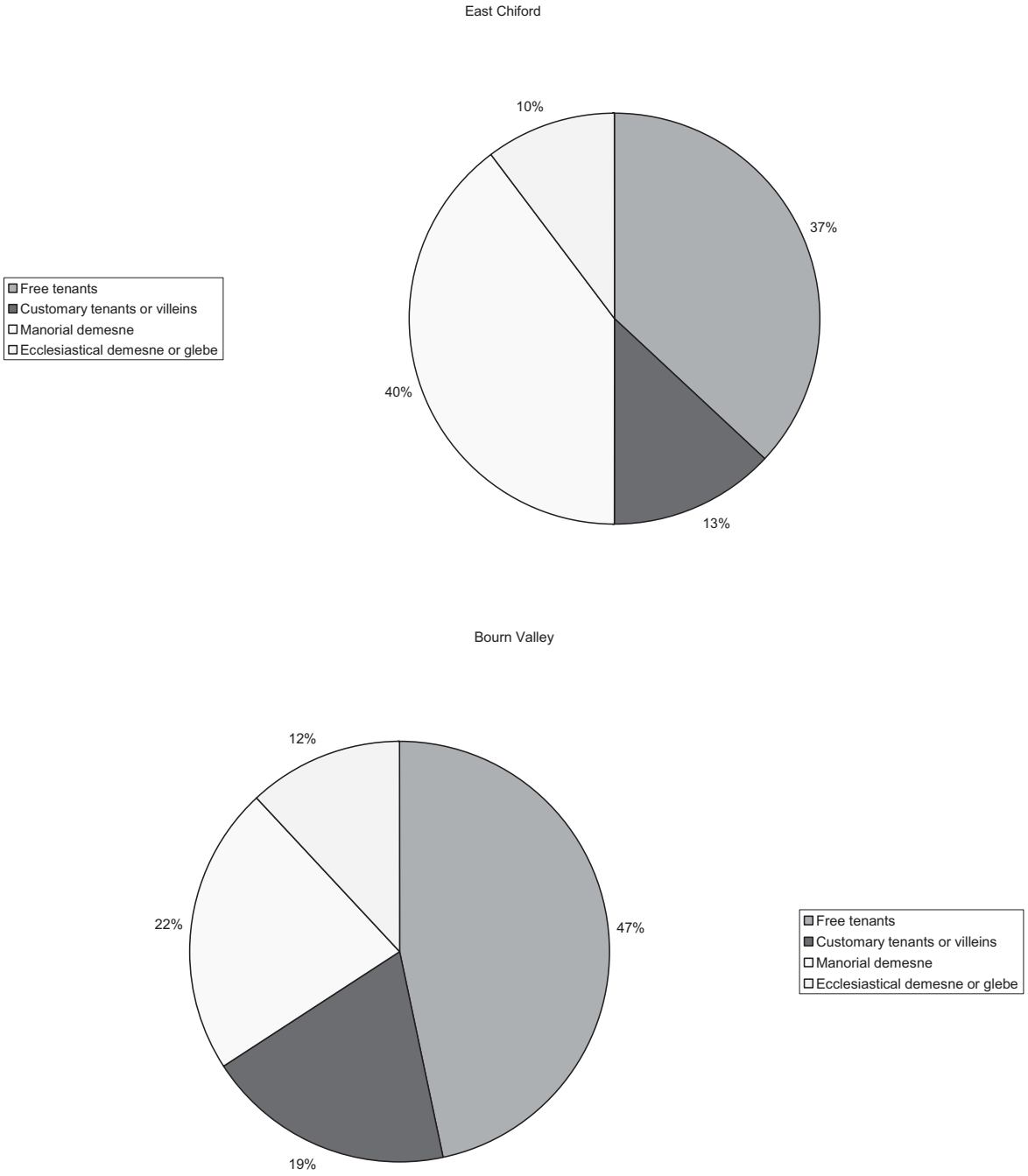
[626] Additions made with the help of RAF aerial photographs found in CRO, CPE/UK/2024/3006-9, 3047-3053; G. Rees, 'Land at Harlton Road, Little Eversden, Cambridgeshire, excavation report' (unpublished report, Oxford East Archaeology, 2009). Black cross-hatching is ridge and furrow crop marks.

[627] Calculation offered in B. Campbell, 'Land, labour, livestock, and productivity trends in English seigniorial agriculture, 1208-1450', in B. Campbell & M. Overton (eds.), *Land, labour, and livestock: historical studies in European agricultural productivity* (Manchester, 1991), 149.

Figure 4.9 Social distribution of land in the Bourn Valley and East Chilford, 1279



Source: Caley & Illingworth (eds.), *RH*, ii, 420-30, 510-20, 562-4, 568-9.

Table 4.4 Social distribution of land in the Bourn Valley and East Chilford, 1279

	Bourn Valley		East Chilford	
	Hectares	**%**	**Hectares**	**%**
Free tenants	1125	47	1017	37
Customary tenants or villeins	466	19	359	13
Manorial demesne	538	22	1090	40
Ecclesiastical demesne or glebe	287	12	286	10
Total	**2416**	**100**	**2752**	**100**

Source: Caley & Illingworth (eds.), *RH*, ii, 420-30, 510-20, 562-4, 568-9

As well as the smaller demesnes, more land in the Bourn Valley was held by labour rents than in East Chilford; in 1279, 22 percent of total cultivated land compared with 11 percent. Even though the Bourn Valley had high levels of personal freedom amongst its inhabitants, many very wealthy free tenants were still required to perform labour services on the demesnes. For example three influential free tenants to Lord William Mortimer provided a week's worth of ploughing in addition to their cash rent.[628] Some of the Kingston tenants actually were required to do labour works on another manor in Foxton, which is understandable given we know William and his successor Constantine Mortimer were lords of manors elsewhere in Cambridgeshire and Norfolk.[629] Harvest was a time of particularly oppressive (highly despised) labour obligations in the form of boon works, for example, those demanded by the Priory of Barnwell over its tenants at Barton.[630] However, the smaller size of the demesnes in the Bourn Valley meant it did not require as much labour to meet the demands of cultivating them. Thus, it was the higher amount of labour rents, the smaller total area of demesnes, and the ability to get free tenants to do customary works that made direct demesne management viable in the Bourn Valley.[631] Any

[628] Caley & Illingworth (eds.) *RH,* ii, 514.

[629] C. Moor, *Knights of Edward I*, iii (London, 1930), 206-7; W. Blake, 'Norfolk manorial lords in 1316', *Norfolk Archaeology*, 30 (1952), 241, 270, 286.

[630] J. Clark & F. Maitland (eds.), *Liber Memorandum Ecclesie de Bernewelle* (Cambridge, 1907), 302-4.

[631] It has been shown elsewhere in and around Cambridge that lords even after the Black Death were able to extract labour works from their tenants. See F. Page, *The estates of Crowland Abbey: a study in manorial organisation* (Cambridge, 1934), 126-8; F. Maitland, 'The history of a Cambridgeshire manor', *EHR*, 9 (1894), 422; M. Bailey, 'The Prior and Convent of Ely and their management of the manor of Lakenheath in the fourteenth century', in M. Franklin & C. Harper-Bill (eds.), *Medieval ecclesiastical studies in honour of Dorothy M. Owen* (Woodbridge, 1995), 18.

shortfalls were made up through wage labour, as recorded for demesnes at nearby Little Gransden and on the farms of well-to-do peasants at nearby Cottenham.[632]

Meanwhile the very small proportion of land rented through labour obligations in East Chilford was certainly not enough to support the cultivation of grain demesnes. Here there was 13 hectares of demesne for every tenant owning labour services, while in the Bourn Valley it was only three and a half hectares of demesne.[633] Three-quarters of all tenant land in East Chilford had their rents commuted to either produce or cash by 1279, and it only increased during the course of the fourteenth century. Thus the only way the shortfall in labour could have been addressed in East Chilford was to employ significant numbers of wage labourers.[634]

What did this all mean for the divergent timing and extent of demographic and settlement contraction in the two areas in the late Middle Ages? Essentially, the lack of balance between labour demands and labour availability from the late thirteenth century in East Chilford led to some important changes. Manorial lords were no longer able to extract labour through extra-economic means for their demesnes and the only option for large tenant farmers to obtain labour was by hiring wage workers. The prohibitive costs of this inevitably played a role in the general conversion to a more pastoral economy, where less labour was needed. Meanwhile, the more balanced ratio between demesne area and labour (which could still be provided through customary works) in the late thirteenth and early fourteenth century in the Bourn Valley, meant that arable farming through the open field system stayed was more viable to manorial lords. Employment opportunity stayed much more stable in the Bourn Valley, in line with a higher level of continuity in the modes of exploitation. Economic change in East Chilford brought about a type of farming from the late 1200s which simply supported less people.

A great deal of evidence points to the stability of arable farming in the Bourn Valley during the late Middle Ages – which happened to go hand in hand with the resilience of direct demesne management. In 1280, almost 80 percent of the total parish areas were arable fields. It seems that arable cultivation really spread across the Bourn Valley during the twelfth century, likely stimulated by high demographic pressure on existing resources, and was managed through communally managed

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[632] BL, Cott. MS. Claud C., no. 9, fos 149-52; F. Page, 'The customary poor-law of three Cambridgeshire manors', *Cambridge Historical Journal*, 3.2 (1930), 128.

[633] Caley & Illingworth (eds.) *RH,* ii, 420-30, 510-20, 562-4, 568-9.

[634] As shown in parts of south-east England in K. Biddick, 'Medieval English peasants and market involvement', *Journal of Economic History*, 45 (1985), 828-9.

cropping shifts.[635] Thirty examples of ridge and furrow survive in the Bourn Valley parishes and their wide distribution even in some of the more dubious areas for arable cultivation such as the upper ridges and poorly drained valley bottoms reveal how it had extended into the marginal parts of each parish. By the thirteenth century grazing was becoming increasingly reduced to the stubbles close to the Bourn Brook, demonstrated by the reduction in meadows from 64 hectares in 1086 to 16 hectares in 1280.[636] Although it is conceded that ridge and furrow can also often be evidence for post-medieval land-use, the location of the ridge and furrow on these marginal areas suggests they were of medieval origin since once arable cultivation retracted after the mid fourteenth century, these lands reverted back to scrub land and were never touched by the plough again.[637] Access to woodlands also became increasingly restricted, and those that remained were in the hands of signorial lords or converted into deer parks.[638]

The focus on arable farming continued through the fourteenth century, even after the Black Death. William Castelacre, who held most of the land in Eversden in 1397, had most of his wealth tied up in grain: 300 quarters of wheat, 140 quarters of barley and 360 quarters of dredge.[639] His flock of 120 sheep was worth 90 shillings in total but his store of grain was valued at 4220 shillings. Some of this grain would have been used for household use throughout the year, though much was produced for sale, perhaps in nearby Cambridge, or even one of the weekly village markets such as the one founded in Kingston in 1306.[640] Indeed, evidence from neighbouring parishes has shown villeins in the thirteenth and fourteenth centuries carrying their lords' grain to Cambridge market as a service.[641] The close proximity to Cambridge

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[635] M. Postgate, 'The open fields of Cambridgeshire' (unpublished PhD thesis, University of Cambridge, 1964); 'Field systems of East Anglia', in A. Baker & R. Butlin (eds.), *Studies of field systems in the British Isles* (Cambridge, 1973), 294-5, 297. See the evidence of twelfth-century assarts made into demesnes at Harlton in N. Longeville (ed.), *Newington Longeville charters* (Oxford, 1921), 75-6.

[636] Otway-Ruthven, 'Cambridgeshire Domesday', in Salzman (ed.), *VCH*, i; Caley & Illingworth (eds.), *RH*, ii, 420-30, 510-20, 562-4, 568-9.

[637] See the situation in Kingston in 1340 in Vanderzee (ed.), *Nonarum Inquisitiones*, 208.

[638] Baldwin St. George had a deer park in Kingston in 1269. See TNA, *Calendar of Patent Rolls AD 1266-1272*, vi (London, 1913), 388. Lord Constantine Mortimer claimed 40 hectares of woodland for himself in 1355. See TNA, C 135/137/3.

[639] *Inquisitions Miscellaneous,* vi, 97-8.

[640] TNA, *Calendar of the Charter Rolls AD 1300-1326*, iii (London, 1908), 72.

[641] E. Miller, *The Abbey and Bishopric of Ely: social history of an ecclesiastical estate* (Cambridge, 1951), 84-5.

kept the costs of transportation of grain low for the manorial producers.[642] Some agricultural produce may even have found its way into markets outside of Cambridgeshire given the generally decent quality of the waterways in the eastern countries.[643] Grain was shipped down to London as part of a trade route which included the ports of East Anglia.[644] The actual process of milling the grain, however, was undertaken locally, as reference can be found for at least one manorial mill in each of the Bourn Valley parishes.[645] Overall, it is difficult to find much reference to pastoral farming in the late Middle Ages. In Harlton no mention of sheep-farming is made until a reference to a fold-course in 1561.[646]

In contrast, the fragmentation of the demesnes from the late thirteenth century and the more distorted balance between labour availability and labour demands in East Chilford, effectively gave rise to changing composition of agricultural production from grain cultivation to higher livestock densities.[647] While arable fields extended over 80 percent of the Bourn Valley parishes in 1279, in East Chilford it was only around 60 percent. The low levels of villein or customary tenant landholding (13 percent of total land) and low level of labour rents (on just 11 percent of total land), easily accommodated pastoral farming.[648] Where grain production required large seasonal workforces, pastoral farming only needed a small band of specialised stock keepers through the year, such as the four shepherds at West Wickham in the Hundred Rolls where one is actually accused of stealing sheep.[649] In

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[642] Transport costs were often hard to bear for arable farmers. It has been calculated that the price of carriage of grain amounted to about seven percent of the purchase price in 1339 for a trip from St. Ives to Cambridge. The Bourn Valley was much closer. Masschaele, *Peasants, merchants, and markets*, 210.

[643] See J. Langdon, 'Inland water transport in medieval England', *Journal of Historical Geography*, 19 (1993), 1-11. Also recently with particular focus on Cambridgeshire, M. Chisholm, 'The medieval network of navigable Fenland waterways II: Barnack stone transport', *Proceedings of the Cambridge Antiquarian Society*, 100 (2011), 171-84.

[644] D. Owen (ed.), *The making of King's Lynn. A documentary survey* (London, 1984), 49-50.

[645] SCC, 6/175, nos 15-6; H. Salter (ed.), *A cartulary of the Hospital of St. John the Baptist*, i (Oxford, 1914), no. 46; Salzman (ed.), *VCH*, i, 345, 421; TNA, CP 25(1)/26/44, no. 20; CP 25(1)/26/49, no. 17; CUL, QC, 59, no. 36; RH, ii, 514; BL, MS Lansdowne Manuscripts, no. 375, fo. 134; MC, Muniments, nos 5394-6.

[646] TNA, E 150/106/2.

[647] As argued generally for south-east England in B. Campbell, K. Bartley & J. Power, 'The demesne-farming systems of post-Black Death England: a classification', *Agricultural History Review*, 44.2 (1996), 134, 143; B. Campbell, 'Constraint or constrained? Changing perspectives on medieval English agriculture', *NEHA- Jaarboek voor Economische, Bedrijfs- en Techniekgeschiedenis*, 61 (1998), 22.

[648] Caley & Illingworth (eds.), *RH*, ii, 420-30, 510-20, 562-4, 568-9.

[649] A. Watkins, 'Cattle grazing in the Forest of Arden in the later Middle Ages', *Agricultural History Review*, 37.1 (1989), 12; Caley & Illingworth (eds.), *RH*, ii, 429-30, 568-9; TNA, *The assizes held at*

1347, a number of the East Chilford parishes had to provide wool to King Edward III, in what was termed as a 'forced loan' of 20,000 sacks (although there was little chance of repayment) in order to finance continuing war with France.[650] It was calculated that each sack was to be 165 kilograms, thus Shudy Camps contributed around two sacks, Horseheath around three and a half sacks, and Bartlow one sack.[651] What is interesting is not the total amount but the composition of the contributions to this loan in East Chilford. In Horseheath just 37 percent of the wool came from manorial flocks, while in Shudy Camps it was just 29 percent. A significant proportion was made up of wool taken from the successful local tenant farmers of the area, which reveals how sheep farming had been well and truly taken up by the new emerging social group in the area. Further indirect evidence for the importance of sheep is suggested by the sale of large quantities of wool as well as timber at the local market of Linton, which had received a grant for a weekly market and fair from 1240.[652]

The transition to a more pastoral economy was supported by an increased value and protection of grazing lands. Sampson of Frankenhoe rendered 3s.8d per annum for just less than half a hectare of pasture in the Hundred Rolls, which was 13 times the average money rent for the same amount of arable in the area (3.25d).[653] Some of the wealthier tenants used fold-courses to gain more access to pastures. The fold-courses could either be the right to graze sheep over other tenants' arable lands during fallow periods (in the irregular open fields in the very far west of the parishes) or in specifically created enclosures (probably more common in East Chilford). One example is William le Harper, a wealthy local tenant who lived at Horseheath. He paid a subsidy at Shudy Camps of 3s. in 1327 and managed to consolidate 35 hectares across four parishes, later coming to hold the 43 hectare estate that belonged to John de Mimiac in the Hundred Rolls.[654] Even though he already had two houses

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Cambridge A.D. 1260: being a condensed translation of assize roll 82 in the Public Record Office (Linton, 1930), 11.

[650] T. Lloyd, *The English wool trade in the Middle Ages* (Cambridge, 1977), 200-2; G. Harriss, *King, parliament and public finance in medieval England to 1369* (Oxford, 1975), 450-5.

[651] TNA, E 179/242/8, fos 6-7. See TNA, *Calendar of Close Rolls AD 1341-1343*, vi (London, 1902), 122.

[652] TNA, *Calendar of Charter Rolls AD 1226-1257,* i (London, 1908), 294. See also J. Clapham, 'A thirteenth-century market town: Linton, Cambs', *Cambridge Historical Journal*, 4.2 (1933), 194-202. For timber in Linton see PCA, Barham, AA, nos. 2-3. For the de Furneaux market and fair see TNA, *Calendar of Charter Rolls AD 1257-1300,* ii (London, 1902), 262.

[653] Caley & Illingworth (eds.) *RH*, ii, 427.

[654] Caley & Illingworth (eds.) *RH*, ii, 428; TNA, *Calendar of Patent Rolls AD 1307-1313*, i (London, 1894), 159; TNA, C 143/75/12; TNA, *IPM AD 1336-1347*, viii (London, 1913), 242-3; TNA, *IPM AD 1377-1384,* xv (London, 1970), 106-7; TNA, C 137/34/2; TNA, C 139/37/4.

according to the rolls, by securing the quit-rents to Robert de Plessy's holding (as of 1280) centred on the moats at Cardinal's Farm, he acquired extra pasture for his animals by recovering a fold-course for his sheep which belonged to the Bernham fee that the land was originally devised from.[655] The maintenance of sheep-folds was important in East Chilford, and Waltham Abbey rigorously guarded theirs at the beginning of the fourteenth century for their rectory.[656]

4.5 A 'later' late-medieval decline in the Bourn Valley

Of course none of the above is intended to understate the level of population decline and retraction in settlement and cultivation seen in the Bourn Valley later in the 1300s. While the continuity in economic and social structures may have delayed the demographic slump (in comparison with East Chilford), between 1327 and 1377 the population of the five parishes studied was halved. It was a difficult period for the rural inhabitants who suffered immensely. Indeed, nearby Dry Drayton (only a handful of kilometres away) has been described as utterly impoverished during the 1320s and 1330s, and it is difficult to see how the Bourn Valley would have been any different.[657] Evidence shows villagers 'trading down' towards poorer quality grains such as barley and rye during the fourteenth century, and even lords intermixed wheat with other grains on their demesnes.[658] By the end of the fourteenth century, the difficulty in maintaining and regulating the common fields is entirely apparent from court roll evidence noting conflicts over boundaries and grazing times in Kingston.[659] Discontent led to rioting, and it is unsurprising to find Bourn Valley inhabitants involved in the events of the 'Peasants Revolt' in 1381.[660]

The expansion of the cultivated arable through open fields in the thirteenth century, likely exacerbated any environmental problems which occurred in the fourteenth century. The culture of land hunger moved cultivation into the most unsuitable areas of the parishes – the high exposed boulder clays or the heavy water-

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[655] BL, Add. MS. 5823, fo. 244, 257.

[656] BL, Cott. MS. Tib. C., no. 9, fo. 131.

[657] J. Ravensdale, 'Population changes and the transfer of customary land on a Cambridgeshire manor in the fourteenth century', in Smith (ed.), *Land, kinship and life-cycle*, 207.

[658] On the sowing of barley and rye in the Bourn Valley in the fourteenth century, see Elrington (ed.), *VCH*, v, 167-8. On the issue of 'trading down' in times of crisis, see A. Appleby, 'Grain prices and subsistence crises in England and France, 1590-1740', *Journal of Economic History*, 39 (1979), 871-87.

[659] CCRO, R 52/12/1/1-10.

[660] W. Palmer & H. Saunders (eds.), *Documents relating to Cambridgeshire villages* (Cambridge, 1928), 28.

logged gault clays of the valley bottom. It is inevitable drainage problems would have occurred as a result. In fact, Lord Constantine Mortimer actually request a papal induct to allow him to conduct Mass at his own chapel next to his isolated manor at Kingston Wood, on the grounds that travelling the distance to the village was too precarious with regard to the flooding and deep mud.[661] In Grantchester (one of the closest villages to Cambridge), the manor of Burwash was still valued at a decent 16 marks in 1311, but after terrible waterlogging of the meadows and ruination of the farm house, it only drew rents totalling 3 pounds by 1355.[662] The difficulties experienced in the Bourn Valley later in the fourteenth century are also shown by the cases of indebted landholders losing their land to local creditors. For example, John Wyot was a prolific local source of credit to villagers in the Bourn Valley as seen from the court rolls of nearby Oakington.[663] Chris Briggs has suggested that Wyot from his base in Dry Drayton and Comberton capitalised on the failure of many of his debtors to pay their debts (such as William Fraunce in 1316), thereby acquiring a wide span of land in the Bourn Valley.[664] Elsewhere there is evidence that a number of men from the village of Barton owed money to Cambridge Jews, and were in danger of forfeiting their property.[665] It was these kinds of problems that hardly put the Bourn Valley in a good position to deal with the recurrent effects of plague and famine during the fourteenth century, the most devastating of course, being the 1348-50 Black Death.[666]

4.6 Conclusion

The earlier retraction in settlement in East Chilford than in the Bourn Valley was ultimately down to the greater level of social and economic change that occurred from the second half of thirteenth century onwards. In East Chilford, the early fragmentation of demesnes, the move to indirect exploitation, and spate of sales or

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[661] W. Bliss (ed.), *Calendar of papal registers relating to Great Britain and Ireland*, ii (London, 1895), 161.

[662] TNA, C 134/22/10; C 135/131/8, no. 19.

[663] CUL, QC, 3 & 4 (Oakington court rolls).

[664] C. Briggs, 'Creditors and debtors and their relationships at Oakington, Cottenham and Dry Drayton (Cambridgeshire), 1291-1350', in P. Schofield & N. Mayhew (eds.), *Credit and debt in medieval England c.1180-c.1350* (Oxford, 2002), 137-9.

[665] KCA, BAR, nos 11, 76. Attention brought to this source by C. Briggs, 'Seigniorial control of villagers' litigation beyond the manor in later medieval England', *Historical Research*, 81 (2008), 399-422.

[666] Indeed, in nearby Gamlingay, 50 percent of the tenants on Mertonage Manor died. Recovery was slow as even in 1385, tenants were being given concessions to settle and build houses there. See E. Lowry, 'The administration of the estates of Merton College in the fourteenth century' (unpublished DPhil thesis, University of Oxford, 1933), 170-2.

leases to successful peasants had two effects. First, it led to high levels of social and economic polarisation, pushing the impoverished to the margins of subsistence or to search for pastures new. Second, the earlier dismantlement of the manorial system and the waning of the powers of extra-economic coercion created an imbalance between the demand for and the availability of labour. Remaining manorial lords with demesnes and successful tenant farmers with large farms in difficult economic conditions did not want to resort to employing large quantities of wage labour. This, in effect, provoked the move from arable to pastoral farming from the late thirteenth century – which really did require less labour input. Meanwhile, the same move towards demesne fragmentation and leasing did not occur in the Bourn Valley, which had two effects. First, it limited and restricted opportunity for the rise of a substantial group of prosperous tenant farmers, thereby preventing economic polarisation. Second, the better balance between small demesne sizes and the access to labour (through continuing extra-economic obligations, in part) created a more favourable context for the resilience of directly managed arable farms through manorial lords. In all likelihood, it was this that restricted the demographic and settlement decline in the Bourn Valley until much later in the fourteenth century – and possibly after the Black Death.

Chapter 5
The rise of the tenant farmers and the decline of village communities in the Dutch river area, 1129-1650

"The game's out there, and its play or get played. That simple"

Omar Little

5.1 Social and economic polarisation and settlement development

Even before the late Middle Ages, social and economic hierarchies had existed in many parts of Western Europe. Perhaps the most obvious example is the distinction made between lords, often aristocratic and wielding jurisdictional powers, and the peasants or tenants; essentially the 'common folk'. It would be wrong, however, to simply draw an opposition between an elite lordship and a homogenous mass of rural agriculturalists. Even within one village, there could be numerous social, tenurial, and legal statuses among the peasantry. Although nearly all tenants had to owe some sort of fealty to either a local or territorial lord, some owed more customary dues and had to perform more onerous obligations to their lord than others. In some parts of Western Europe, there was even a distinction made between 'serfs' (the unfree) and 'freemen', while certain tenants were able to effectively 'buy' their freedom by commuting their customary works into money rents. In sum, there were differences at a local level between people living in rural communities, much before the late Middle Ages.

Nonetheless, it was not until the late medieval period in Western Europe that rural regions begun to be increasingly economically and socially polarised.[667] Outside the very basic distinctions between lord and peasant, aristocrat and commoner, serf and freeman, there grew new stratifications between '*les coqs du village*' and other poorer, less successful inhabitants.[668] Peasants began to produce more surpluses for markets and began to accumulate and consolidate their own landed estates. Social and economic mobility was simply higher in the late Middle Ages and groups of very wealthy and locally significant, well-to-do rural tenants or farmers were able to emerge from previously very meagre origins as peasants. Consequently, new avenues for disputes between villagers arose, as communities often descended into internal conflict.[669]

In this chapter, it is considered how this increased stratification affected the development of settlements in the late Middle Ages and early modern period. How did social and economic polarisation affect the growth or contraction of villages and farms? Did stratification make settlements more vulnerable to decline? These

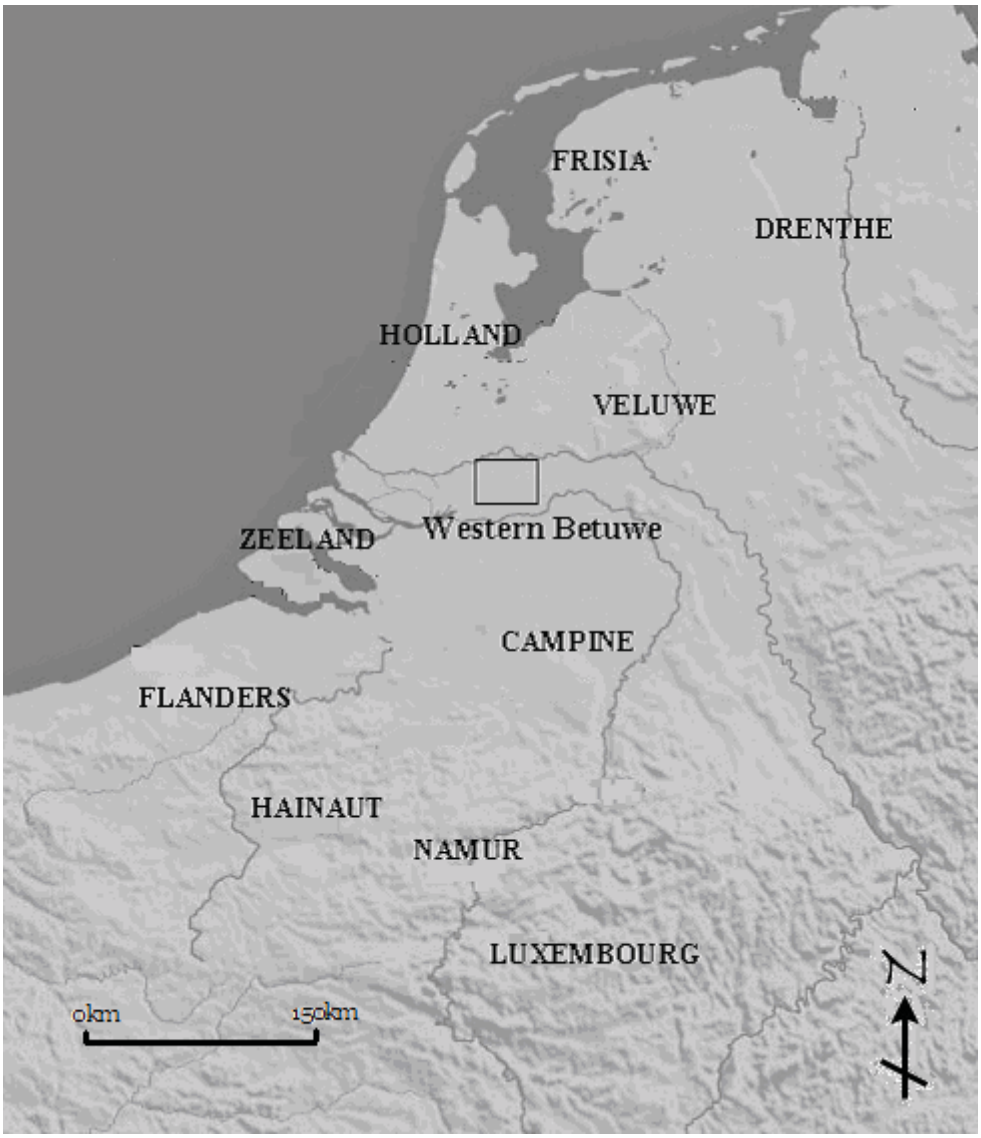
[667] Particularly in market-orientated regions of the Low Countries; for example, see van Bavel, 'The medieval origins of capitalism', 72-7.

[668] See, for example, Duby, *L'économie rurale*, ii, 524, 591; Hilton, *The English peasantry in the later Middle Ages*, 40-1.

[669] M. Bourin, 'Peasant elites and village communities in the south of France, 1200-1350', in Coss et al. (eds.), *Rodney Hilton's Middle Ages*, 101-14; R. Hilton, 'Les communautés villageoises en Angleterre au Moyen Age', in *Les communautés villageoises en Europe occidentale* (Auch, 1984), 118-28.

questions are addressed through one case study set in an area of the Dutch river area (situated in the modern-day Netherlands) between the twelfth and seventeenth centuries where it is known that during this period both social and economic polarisation and changes to settlements occurred. In this area (referred to in this chapter as the Western Betuwe), habitation up to the fifteenth century was almost entirely restricted to a series of concentrated villages lining a main river (the Linge). However, during the sixteenth century, new isolated farmhouses were beginning to emerge all across the landscape, while the original villages simultaneously began to severely contract. How do we explain this process, and its timing? Did social and economic polarisation in the western part of the Betuwe have a role to play in stimulating new settlement development?

Figure 5.1 The Low Countries, c. 1600



The remaining sections of the chapter are organised in the following ways. In the second section, some consideration is given to the reasons why settlement remained, by and large, restricted to the villages along the river up to the fifteenth century. In the third section, the emergence of isolated farmhouses in the sixteenth century away from the river is explained through the rise of a group of large local tenant farmers, who exploited dynamic developments in land and lease markets from the late Middle Ages onwards. In the fourth section, some causal connections are considered between the emergence of the new farming elite with their large farms and the decline and stagnation of the original villages lining the river. It is clear that dynamic changes within society in this part of the Dutch river area from the late Middle Ages onwards increased the vulnerability of the village settlements, however, in the fifth section we ask 'why' – why did these dynamic changes occur and what can explain the timing? In this section it is argued that the move towards economic and social polarisation (and in turn, a heightened vulnerability of settlement to decline) was only possible on the back of some very deep-rooted and skewed institutional and organisational structures. These are divided into four sub-sections; (i) the rapid decline of the manorial system after 1300, (ii) long-term continuity in polarised property distribution, (iii) uncontested power balances, and (iv) visible expressions of the social hierarchy rooted in the past. In the sixth section, the aftermath and consequences of the changes to society and settlement are considered (after 1650) and the basic arguments of the chapter are summarised.

5.2 'Keeping one's head above the water': the Linge River and its villages

The geographical focus for this case study is the whole area bisected down the middle by the Linge River, comprising three administrative regions known as the Tielerwaard, the Land van Buren, and the Ambt Beesd and Rhenoy. Even as late as the fifteenth century, habitation in this area was still mainly confined to the elongated villages straddling the river. In this section it is suggested that part of the reason was the environmental limitations associated with the region, in particular the difficulties of water drainage and the constant fear of flooding.

Traces of Iron Age and Roman pottery have been found in the Western Betuwe, indicating at least a level of early occupation. Higher quantities of archaeological evidence have been turned up for the eastern parts of the Dutch river area however, suggesting that the east was settled first and more heavily in the

Roman period, probably due to the wetter conditions in the Western Betuwe.[670] Any Roman occupation in the west likely retracted around the fourth century due to hydrological problems. Only a limited number of settlements show any signs of continuity from the Roman to the early medieval period, revealed by place-name evidence such as the village of Tricht derived from the Latin 'Trajectum'.[671] However, caution must be exerted even with place-names, since scholars have shown that Latin names were often used for newly-founded settlements up to the seventh century.[672]

Some of the villages that are visible today along the Linge river originated in the Merovingian period, representing a Frankish re-occupation between the sixth and eighth centuries, after a probable population nadir after the end of the Western Roman Empire.[673] For example, Buurmalsen was a village with Merovingian origins, characterised by a more rounded structure with houses clustered around a central green.[674] However, most of the settlements along the Linge appeared later, in the Carolingian period, and instead can be identified by a more linear, stretched physical form, yet curiously still combining this a central green.[675] The Carolingian

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[670] P. Modderman, 'Het oudheidkundig onderzoek van de oude woongronden in de Over- en Neder-Betuwe', *Oudheidkundig Mededelingen uit het Rijksmuseum van Oudheden te Leiden*, 30 (1949), 25-61; W. Willems, 'Romans and Batavians: regional developments at the Imperial frontier', in R. Brandt & J. Slofstra (eds.), *Romans and natives in the Low Countries: spheres of interaction* (Oxford, 1983), 105-28. Archaeological finds in the river area have increased through excavations prior to the construction of a road known as the 'Betuweroute' connecting Rotterdam and Zevenaar. See B. Goudswaard, 'Archeologie en Betuweroute', *Bijdragen en Mededelingen Vereniging Gelre*, 88 (1997), 173-92. Also A. Folkerts, 'Op zoek naar Romeinen en Batavieren in de Betuwe', *Mededelingen van de Historische Kring West-Betuwe*, 20 (1992), 35-8.

[671] P. Henderikx, *De beneden-delta van Rijn en Maas: landschap en bewoning van de Romeinse tijd tot ca. 1000* (Hilversum, 1987), 43; D. Blok, 'De eigen inbreng van de plaatsnaamkunde in de nederzettinggeschiedenis', *Naamkunde*, 5 (1973), 236-7. A limited continuity in settlement argued in W. van Es, 'Volksverhuizing en continuiteit', in W. van Es & W. Hessing (eds.), *Romeinen, Friezen en Franken in het hart van Nederland; van Traiectum tot Dorestad 50 v. C. – 900 n. C.* (Utrecht, 1994), 64-81.

[672] M. Roblin, *Le terroir de Paris aux époques gallo-romaine et franque* (Paris, 1971), 89-91.

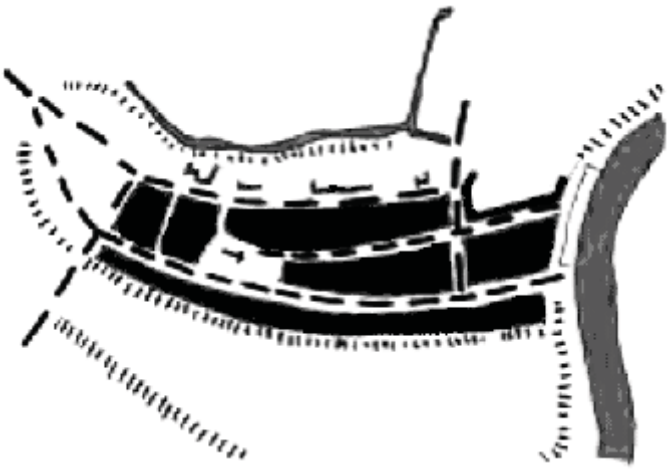
[673] E. Bult & D. Hallewas, 'Archaeological evidence for the early-medieval settlement around the Meuse and Rhine deltas up to ca. AD 1000', in J. Besteman, J. Bos & H. Heidinga (eds.), *Medieval archaeology in the Netherlands. Studies presented to H.H. van Regeteren Altena* (Assen, 1990), 71-90.

[674] J. Harten & J. Schuyf, 'Possible planned medieval villages in the Netherlands', in B. Roberts & R. Glasscock (eds.), *Villages, fields and frontiers: studies in European rural settlement in the medieval and early modern periods* (Oxford, 1983), 43-59.

[675] The difference between the two types of concentrated settlement are discussed in R. den Uyl, 'Dorpen in het rivierengebied', *Bulletin van de Koninklijke Nederlandse Oudheidkundige Bond*, 11 (1958), 97-114; J. Renes & G. van de Ven, 'Siedlung und Landschaft im östlichen Rhein-Maas-Delta',

settlements can also be identified by the way they incorporated the suffix –heem into their names, something developed in the later Frankish period.[676] Many of the river-edge villages expanded with demographic growth in the eighth and ninth centuries, fuelled by the crystallisation of the manorial system and the desire to reap rewards of colonisation and agricultural expansion.[677] The small town of Culemborg started out as a small agricultural settlement with block-parcels dating back to these centuries.[678] Houses in the villages were often aligned along a few main roads which ran parallel to one another, as shown in the example of Beesd below.

Figure 5.2 Elongated structure of Beesd (before modern twentieth-century growth)



The reason why people lived in settlements close to the Linge river must have been because this was the highest land, and therefore less affected by problems of flooding and drainage.[679] The higher lands were dry enough to support arable agriculture, thus around the villages developed arable field complexes made up of an

Siedlungsforschung, 7 (1989), 173-9; J. Harten, 'Dorpen in het rivierengebied: speurtocht naar planning', *Nederlandse Geografische Studies*, 68 (1988), 155-76.

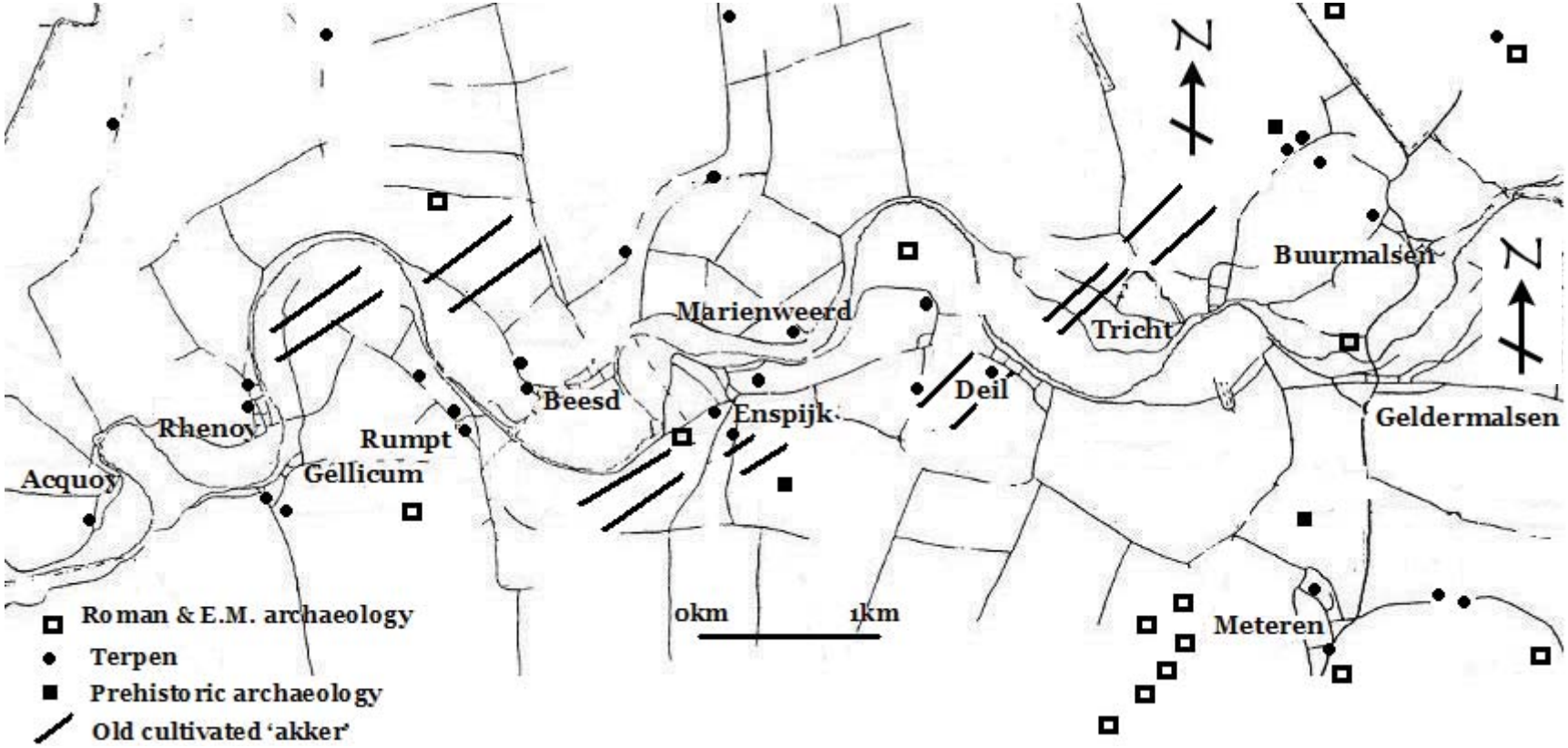
[676] D. Blok, *De Franken in Nederland* (Bussum, 1974), 125-30.

[677] For arguments of this type, see Despy, 'Villes et campagnes', 145-68; J. Devroey, 'Mansi absi: indices de crise ou de croissance de l'économie rurale du haut Moyen Age?', *Le Moyen Age*, 82 (1976), 97-118.

[678] J. Renes, 'Culemborg-Redichem', *Gelders Oudheidkundig Contactbericht*, 90 (1981), 5-8; 'Culemborg en omgeving', *Geografisch Tijdschrift*, 16 (1982), 476-8.

[679] In fact, settlements located close to the raised banks of rivers and streams was a common landscape feature of the early medieval river area. See J. Renes, *Op zoek naar de geschiedenis van het landschap. Handleiding voor onderzoek naar onze historische omgeving* (Hilversum, 2010), 70-1.

Figure 5.3 Distribution of archaeological finds, *terpen* and medieval *akker* complexes in the Western Betuwe



irregular distribution of scattered block parcels.[680] Remnants of these complexes can still be discerned from the landscape today, for example, at Buurmalsen behind the Spijk, the Groene Weg, and the Molenhof, by the fortified house of Crayenstein at Tricht, and in the Marienweerd Veld once belonging to the great Norbertine abbey of Marienweerd. To the south of the Linge, similar examples can be found at the Hooge Wiel, the Waardsche Blok, Boutensteyn, and De Worden at Enspijk.[681]

It was not until the eleventh century that much of the lower-lying basins away from the Linge river began to be reclaimed, remaining areas poorly suited for supporting either cultivation or settlement. During the eleventh and twelfth centuries nonetheless, limited attempts were made to settle away from the main villages. The marshy lower-lying lands began to be colonised through 'cope-style' reclamations, bringing more land into use, and being more reminiscent of the colonisation projects seen in Holland between the ninth and thirteenth centuries with long, standardised strip divisions.[682] Evidence for these later reclamations is the surviving field-patterns which provide a stark contrast with the block-parcels of the older-cultivated complexes: for example, the old cultivated Marienweerdse Veld contrasted with the strip-formation of the Vretstrooy leading to the small hamlet of Paveien.

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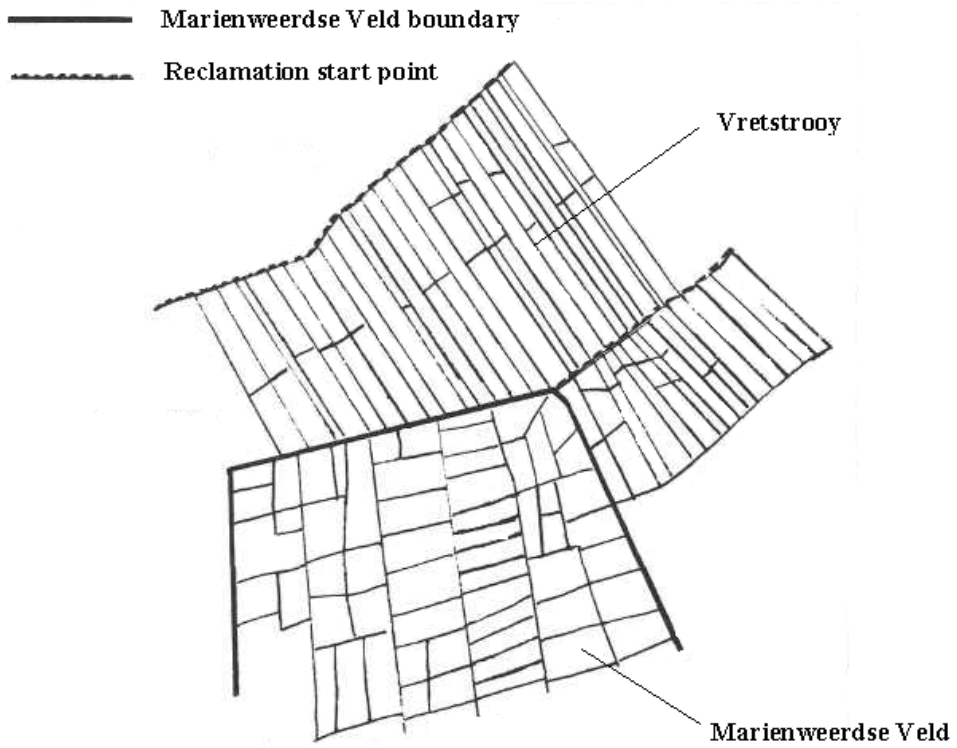
[680] D. Blok, 'De enken', *Driemaandelijkse Bladen*, 10 (1958), 1-5; J. Harten, 'Oude nederzettingsvormen in de Bommelerwaard', in H. Berendsen (ed.), *Het landschap van de Bommelerwaard* (Amsterdam, 1986), 73-5; C. Edelman, 'Oudheidkundige resultaten van de bodemkartering', *Boor en Spade*, 4 (1951), 321-2; C. Edelman, & A. Edelman-Vlam, *Over de perceelsnamen van het Nederlandse rivierkleigebeid* (Amsterdam, 1949), 11-5.

[681] T. Weijschedé, R. Exaltus, A. Koomen & B. van Bemmel, *Gaafheid van bodem ren relief gemeente Lingewaal en gemeente Geldermalsen. Kennisinstrument bij de relatie culturhistorie en ruimtelijke ontwikkelingen* (Wageningen, 2006), 33.

[682] B. van Bavel, 'Marienweerd en de heren van Culemborg. Machtsverhoudingen, goederenbezit en ontginningen in het gebied tussen Lek en Linge', in A. Blommers (ed.), *Rond de Kulenburg. Ridders en ontginningen tussen Lek en Linge 1100-1318* (Culemborg, 2010), 43-58. For the cope-reclamations in Holland see the classic work of Linden, *De cope*.

Figure 5.4 Contrasting medieval reclamation patterns in the Western Betuwe



Adapted from: B. van Bavel, *Goederenverwerving en goederenbeheer van de abdij Marienweerd, 1129-1592* (Hilversum, 1993), 169.

We know settlement was attempted as far out as Paveien as early as 1100 because a parish church appeared there, and later the abbey of Marienweerd took tithes from 20 farms in De Geer te Paveien.[683] However, despite these early attempts at colonisation of the marshy basins, settlement this far from the main villages was neither extensive nor long-lasting. For example, the church of Paveien disappeared not so long after its foundation, sometime between 1166 and 1210.[684] It was probably the pace and style of land reclamation in the Western Betuwe that led to the very precarious and ultimately abandoned settlement in the lower-lying areas, since the far west of the river area suffered from a lowering of the soil level caused by the oxidation of the exposed peat, leaving the isolated settlements susceptible to

[683] J. Renaud, 'Het kerkhof van Paveien', *Bulletin van de KNOB*, 4 (1951), 118-22; P. Beltjes, 'Het kerkhof van Paveie', *Bijdragen en Mededelingen Vereniging Gelre*, 51 (1951), 149-52. See also S. Muller, A. Bouman, C. Brandt & F. Ketner (eds.), *Oorkondenboek van het Sticht Utrecht*, i (Utrecht, 1920), no. 327. On reclamation of this area see P. van Doorninck & J. van Veen (eds.), *Acten betreffende Gelre en Zutphen, 1107-1415* (Haarlem, 1908), 29-31.

[684] P. Beltjes & A. Blommers, 'Eer Culemborg was… Iets over de ontginningsgeschiedenis van het gebied tussen Lek en Linge, waar in de middeleeuwen de heerlijkheid Culemborg is gevormd', in Blommers (ed.), *Rond de Kulenburg*, 106.

flooding.[685] The soils may have been further ruined by the almost complete disappearance of trees as colonisation was extended.[686]

It is still not entirely certain who performed the initial reclamations of the lower-lying, poorly drained marshes. Much of the reclamation work began before the foundation of Marienweerd (1129), so the role of this Norbertine abbey can be discounted[687] (other scholars have tended to emphasize the role of Norbertine expansion in land reclamation).[688] Probably much of the basins were reclaimed in the eleventh and twelfth centuries by aristocratic families such as the van Cuijk's, although some of the very earliest reclamation may even have been undertaken by the Bishop of Utrecht.[689] This assertion is supported by the fact that aristocratic families from an early date owned a great deal of feudal and allodial land in the Betuwe during the Middle Ages; not just the van Cuijk's but also the families of Arkel, Culemborg and Spijk.[690] Certainly many of their lands were located on the

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[685] G. Pouw, 'Onontgonnen geschiedenis. Vragen naar de middeleeuwse ontginningsgeschiedenis van Culemborg', *Culemborgse "Voet"-noten*, 10 (1993), 19.

[686] J. Mulder, 'Het veranderende landschap tussen Lek en Linge (900-1300)', in Blommers (ed.), *Rond de Kulenburg*, 71-3.

[687] For aristocratic reclamation, see B. van Bavel, 'Stichtingsplaats, ontginning en goederenverwerving. De economische ontwikkeling van Norbertijner abdijen in de Nederlanden', *Ideaal en Werkelijkheid: Verslagen van de Contactdag van de Werkgroep Norbertijnse Geschiedenis in de Nederlanden*, 3 (1993), 46.

[688] A misconceived generalisation in S. Andreae Fockema, 'De grote of Zuidhollandse waard', *Studien over Waterschapsgeschiedenis*, 3 (1950); A. Saint-Denis, 'Les débuts du temporel de Saint-Martin de Laon, 1124-1155', *Actes Officiels du Colloque du Centre d'Études et de Recherches Prémontrées*, 14 (1988), 37-55; M. Mostert, 'De goederen van de abdij Berne in het Land van Heusden tot 1236', *Holland*, 14 (1982), 133-9; F. Niermeyer, 'Het klooster Berne en de ontginning van de oostelijke Meierij omstreeks 1200', in N. Addens, S. Fockema Andreae & J. Kuperus (eds.), *Ceres en Clio, zeven variaties op het thema landbouwgeschiedenis* (Wageningen, 1964), 113-28.

[689] For a history of the van Cuijk family, see J. Coldeweij, *De heren van Kuyc (1096-1400)* (Tilburg, 1981). For the early influence of the Bishop of Utrecht in the western Betuwe, see J. Sloet, J. van Veen & A. Martens van Sevenhoven (eds.), *Register op de leenaktenboeken van het vorstendom Gelre en het graafschap Zutphen. Het Kwartier van Nijmegen* (Arnhem, 1924), 427; D. Graswinckel (ed.), *Het oud-archief der gemeente Arnhem* (Arnhem, 1935), nos. 150, 332, 379.

[690] A full list of sources used to plot the distribution of feudal land are listed here. J. Kort (ed.), 'Repertorium op de lenen van de hofstede Arkel in het Graafschap Gelre, 1283-1647', *Ons Voorgeslacht*, 40 (1985), 49-58; 'Repertorium op de lenen van de hofstede Culemborg, 1251-1648', *Ons Voorgeslacht*, 42 (1987); 'Reportorium op de Cuykse lenen in Holland, het Sticht en Gelre, 1129-1649', *Ons Voorgeslacht*, 44, (1989), 252-66; 'Lenen van de graaf van Holland in Gelre', *Ons Voorgeslacht*, 42, (1987), 777-83; 'Repertorium op de lenen van de hofstede Gellicum, 1466-1645 (1717)', <http://www.hogenda.nl/Docs/DocumentView.aspx?KeyValue={95509002-a79b-467c-b108-d8bd6ae04684}>; 'Repertorium op de lenen van de hofstede Heukelum, 1383-1684', <http://www.hogenda.nl/Docs/DocumentView.aspx?KeyValue={053dd86f-a7da-4526-9ffa-

older-cultivated areas (as scattered plots) and had multiple houses in the river villages (for example, the aristocratic Willem van Tuil had 15 hearths in Deil, while the Heer van Enspijk had seven in Enspijk in 1630).[691] However, they also owned lands in the lower-lying basins, for example, the 68 hectares of feudal property belonging to the van Cuijk's in the 'Geeren' area of Buurmalsen.[692]

Despite the reclamation of the lower-lying lands during the eleventh to thirteenth centuries, it was clear nonetheless that a pattern of settlement away from the main villages straddling the river would only be possible if the drainage situation was much improved. Certainly this was the case by the beginning of the fourteenth century, when a more coherent system of dikes was put in place. The Diefdijk was constructed in 1284 to protect the neighbouring Vijfheerenlanden from water flowing down from the Neder-Betuwe in the east.[693] Later this system of dikes was supported by the use of watermills.[694] That is not to say all the water-related problems were solved by this time. The dikes may have helped with the drainage of the marshes but they also contributed to the build-up of water-pressure, which as

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3c155f42a9a9}>; 'Repertorium op de lenen en tijnsen van de proosdij van Oudmunster, 1283-1661', in *Historische reeks Kromme-Rijngebied* (Houten, 2010); 'Repertorium op de lenen van de hofstede Waardenburg, 1548-1792', <http://www.hogenda.nl/Docs/DocumentView.aspx?KeyValue={c70a7b9e-3ddd-4009-bc58-e287a52ba514}>; 'Repertorium op de lenen van de hofstede Buren, 1328-1794', <http://www.hogenda.nl/Docs/DocumentView.aspx?KeyValue={36c054dc-3ead-46f8-bacc-1a803b9e74ad}>; 'Repertorium op de lenen van de Arkelse Hoeve te Tricht, 1621-1794', *De Nederlandsche Leeuw*, 118 (2001); 'Repertorium op de lenen van de hofstede Reygersfoort, 1575-1804', <http://www.hogenda.nl/Docs/DocumentView.aspx?KeyValue={1eba7d71-f9cf-4d1a-8c6e-8ade13bdf749}>; C. Hoek (ed.), 'Lenen van de hofstad te Spijck, 1462-1756', *Ons Voorgeslacht*, 29 & 31 (1974/6); 'Repertorim op de lenen van de hofstede Klingelenberg te Neerijnen, 1377-1804', <http://www.hogenda.nl/Docs/DocumentView.aspx?KeyValue={38ab506f-ffef-4c0a-aab5-f1a68b3f88c6}>; 'Lenen van de hofstede te Boxmeer, gelegen in de Betuwe en in het Land van Heusden, 1282-1682', *Ons Voorgeslacht*, 39 (1984); 'Repertorium op de lenen van de hofstede Haaften, 1561-1795', <http://www.hogenda.nl/Docs/DocumentView.aspx?KeyValue={5daa1cf8-cc17-433b-aefa-8c708173a1d5}>; 'Lenen van de hofstad te Haghensteyn, 1414-1650', *Ons Voorgeslacht*, 33 (1978); 'Repertorium op de lenen van de hofstede Voorne in Zuid-Holland, Het Land van Gelre, Het Sticht van Utrecht, Putten en Heenvliet, 1199-1648', *Ons Voorgeslacht*, 32 & 44 (1977 & 1989); 'Repertorium op de lenen van de hofstede Asperen, 1333-1803', *Ons Voorgeslacht*, 52 (1997).

[691] GELA, Archief van de Familie van Randwijck, 6090, no. 1324.

[692] Kort (ed.), 'Cuykse lenen', no.6.

[693] M. Stein, 'Rivierverleggingen van Maas en Waal in de omgeving van de Bommelerwaard, sinds de bedijking in de middeleeuwen', in Berendsen (ed.), *Het landschap*, 91-110; H. van Heiningen, *Dijken en dijkdoorbraken in het Nederlandse rivierengebied* (The Hague, 1978), 25; A. Langen & R. Tol, 'A concise history of riverine floods and flood management in the Dutch Rhine delta', in T. Downing, A. Olsthoorn & R. Tol (eds.), *Climate, change and risk* (London, 1999), 166.

[694] T. Blok, 'Poldermolens in de Bommelerwaard', in *Gelders molenboek* (Zutphen, 1969), 53-65.

chroniclers from the fifteenth century can confirm, often culminated in severe floods.[695] Constant repairs had to be made to the dikes. Indeed, the abbey of Marienweerd suffered badly from floods, and lost most of their winter supplies in grain when the Linge dike broke in 1432 and 1433.[696] Furthermore, parts of the lower-lying lands were temporarily submerged under water during the winter, even as late as the seventeenth century, as noted in a tax document from 1650.[697]

In sum, there were some significant environmental limitations to habitation in the Western Betuwe, which restricted settlement mainly to the villages on the higher lands along the Linge River. By the fourteenth century, the combination of marshland reclamation and the construction of dikes had created a more feasible context for settlement away from the villages (even though it was still a precarious environment). Theoretically, settlements could have started to emerge in the lower-lying areas at this point in time; however, the isolated large farms did not appear in the western part of the Dutch river area until the sixteenth century. How is this explained?

5.3 The short-term lease market and the rise of the tenant farmers

Despite land reclamation and improvements made to the drainage system in the Western Betuwe by the beginning of the fourteenth century, a series of large farmhouses did not emerge away from the main villages until the sixteenth century. This can be explained through looking at the chronological developments of a market in land for lease.

By 1300, manorialism and direct demesne agriculture in the Western Betuwe had almost entirely disappeared. Aristocratic lords and ecclesiastical institutions no longer had the propensity to exploit their estates directly. During the course of the fourteenth century, large landowners instead decided to exploit their land indirectly by leasing it out to local peasants and farmers. We know a lot about this process thanks to the survival of a number of 'leasebooks' belonging to the great landowning

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[695] J. Kuys (ed.), *De Tielse kroniek. Een geschiedenis van de Lage Landen van de volksverhuizingen tot het midden van de vijftiende eeuw, met een vervolg over de jaren 1552-1566* (Amsterdam, 1983), 164-7. However, some caution must be given to written testimonies on 'natural' disasters, which can be over-exaggerated. As advised in G. Endfield, I. Fernández Tejedo & S. O'Hara, 'Conflict and cooperation: water, floods, and social response in colonial Guanajuato, Mexico', *Environmental History*, 9.2 (2004), 223-4.

[696] Gottschalk (ed.), *Stormvloeden en rivieroverstromingen,* ii, 261-91; GELA, Abdij Marienweerd te Beesd 2, 1170, no. 112.

[697] GELA, Staten van het Kwartier van Nijmegen en hun Gedeputeerden, 0003, no. 368.

abbey of Marienweerd.[698] Landowners such as Marienweerd subdivided large portions of their estates into randomly scattered parcels of about two and a half hectares each.[699] The division of land into small parcels ready for leasing explains why very few farmhouses did not appear away from the main villages in the fourteenth and fifteenth centuries: it acted against any sort of land consolidation. A patchwork of randomly distributed lease plots emerged in the Western Betuwe, each worked by a host of different tenant farmers. In 1442, there were around 200 different tenants using Marienweerd land. The tenants of the plots could also change, given that the plots were put up for lease every six to 10 years.

Nonetheless, by the sixteenth century, large farmhouses appeared in the Western Betuwe, away from the main villages, and at the centre of consolidated farms – how did this happen? One of the reasons was the flexible, fluid and unrestricted nature of the leasing system from the late Middle Ages onwards. There were not many 'rules to the game' here. Quite simply, the farmer who paid the highest price at public auction for the piece of land secured the tenancy.[700] Thus, although each parcel of land went up for lease every six to 10 years, often it would stay in the same families' hands for generations upon generations, if they were able to out-compete any rival bids from inferiorly-resourced neighbours. In the course of the fifteenth century, tenant farmers became more selective about which parcels they wanted to lease, and with clever organisation and patient management over the long-term, they could orientate their plots into coherent farm units. By the sixteenth century, there were around a hundred large isolated farmhouses in the Western Betuwe.[701] The stability of some of these farms was reinforced by favourable relationships between landlords and tenant farmers, who were offered favourable credit conditions and lower rents during periods of crisis such as exceptionally poor

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[698] For the possibilities and limitations of this source, see B. van Bavel, 'Pachtboek, pachtcontract, legger, pachtrekening-courant en rekening: typologie en interpretatie van de laat-middeleeuwse bronnensoorten met betrekking tot de verpachting van grondbezit', in J. Smit, D. den Boer & J. Marsilje (eds.), *Vander rekeninghe. Bijdragen aan het symposium* (The Hague, 1998), 99-110.

[699] van Bavel, 'Land, lease amd agriculture', 29.

[700] For public auctions in river area, see J. Kuys, *De ambtman in het kwartier van Nijmegen (ca. 1250-1543)* (Nijmegen, 1987), 164-9. For public auctions in the Land van Culemborg, see F. Cerutti (ed.), *Hoofdstukken uit de Nederlandse rechtsgeschiedenis* (Nijmegen, 1972), 192. For public auctions in the general Rhineland area, see P. Nève, 'De overdracht van onroerend goed in de middeleeuwen', *Ars Notariatus*, 32 (1985), 27-9; D. Kastner, *Das Schoffenbuch der Stadt Zülpich und die Urkunden des Stadtarchivs* (Cologne, 1996), 12-4.

[701] van Bavel, 'Land, lease', 31.

harvests.[702] The farmhouse and farm complex of 'Rijsen Ooijen' near Meteren is one example of considerable continuity in both ownership and occupation, despite being farmed through a short-term lease.[703]

The process described above is best highlighted through some individual examples, a good one being the fortunes of the 'Haag Spijk' farmhouse near Buurmalsen. It almost certainly was located in the position now occupied by the modern-day farmhouse of 'Den Haag'. The Haag Spijk was not mentioned in the early cartularies belonging to Marienweerd, though it was listed in the abbey's property register of 1347. By the mid-fourteenth century, the Haag Spijk was already clearly an important farmhouse for the abbey. It was listed as a '*hofstat op die spijk*' (the term hofstat or hofstede tended to be reserved for more important farms) and consisted of around 30 hectares.[704] It was likely a compact unit at this time, because the whole 30 hectares were recorded under one entry. Other lands belonging to Marienweerd also came to 30 hectares or more in certain areas, but these were not under one entry but usually split between three or more fields. The farmhouse lay peripheral to the actual village of Buurmalsen (away from the central green though near the peripherally-located aristocratic residences of 'Arkelshoef' and 'Reygersvoort')[705], though it was situated within what can now be identified as an open field complex; made distinct by the irregular patchwork of plots and the characteristic s-shape of the boundaries caused by the poor turning circle of the heavy plough used.[706] The fact it was situated on older-cultivated ground (although away from the main village) and that it appeared to be a coherent farm unit from an early date, suggests that the Haag Spijk may originally have been an early '*uithof*' or

[702] As seen in other parts of the Low Countries in A. van der Woude, 'Large estates and small holdings. Lords and peasants in the Netherlands during the late Middle Ages and early modern times', in P. Gunst & T. Hoffmann (eds.), *Grand domaine et petites exploitations en Europe au Moyen Age et dans le temps modernes* (Budapest, 1982), 194-5; J. Jansen, *Landbouw en economische golfbeweging in Zuid-Limburg 1250-1800. Een analyse van de opbrengst van tienden* (Assen, 1979); C. Baars, *De geschiedenis van de landbouw in de Beijerlanden* (Wageningen, 1973), 122-4, 200-4.

[703] E. van Olst, 'Rijsen Ooijen, een historische boerderij in de Tielerwaard', *SHBO Stichting Historisch Boerderij-onderzoek, Jaarverslag* (1987), 30.

[704] J. de Fremery (ed.), *Cartularium der abdij Marienweerd* (The Hague, 1890), no. 363.

[705] See J. Belonje, 'Het huis Reygersfoort bij Tricht', *Bijdragen en Mededelingen Vereniging Gelre*, 49 (1949), 267-310.

[706] J. Harten, 'Rivierkleilandschap', in S. Barends et al. (eds.), *Het Nederlandse landschap. Een historisch geografische benadering* (Utrecht, 2005), 92-103; 'De invloed van de mens op het landschap', in H. Bruin (ed.), *Het Gelders rivierengebied uit zijn isolement. Een halve eeuw plattelandsvernieuwing* (Zutphen, 1988), 16-38. See also G. Pleijter & J. Vervloet, 'Kromakkers en bol liggende percelen in de ruil-verkaveling Schalkwijk, in het bijzonder bij Tull en 't Waal en bij Honswijk', *Historisch-Geografisch Tijdschrift*, 4 (1986), 13-21.

grange belonging to Marienweerd. Marienweerd's first granges such as Ganshoevel and De Woerd were formed through gifts of land by the van Cuijk family, and lay within the Marienweerdse Veld.[707] Granges further away (like Haag Spijk), however, were built-up and extended by gifts and purchase from local smallholders and medium-sized proprietors, a chronology in line with Norbertine and Cistercian institutions elsewhere in Europe.[708]

As Marienweerd moved from direct exploitation to indirect leasing of its estates from the mid-fourteenth century onwards, the compact farm of Haag Spijk was broken up into separate pieces and leased out to farmers. By 1456, the Haag Spijk had been divided into four smaller units.[709] Three of these were three and a half hectares, and one was 12.5 hectares. The lands were leased to two local farmers, Wouter Lamertssoen and William Pits. Wouter Lamertssoen had already started trying to accumulate lease land in the fifteenth century: indeed, he was one of the first land consolidators in the area. He held a total of almost 70 hectares from the

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[707] Muller et al. (eds.), *OSU*, i, no. 18. Also see Fremery (ed.), *Cartularium*, nos 49, 51.

[708] For example, see A. von Boetticher, *Gütererwerb und Wirtschaftsführung des Zisterzienserklosters Riddaghausen bei Braunschweig im Mittelalter* (Braunschweig, 1990); R. Comba, 'I cistercensi fra citta' e campagne nei secoli XII e XIII. Una sintesi mutevole di orientamenti economici e culturali nell'Italia nord-occidentale', *Studi Storici*, 26.2 (1985), 245-6; C. Berman, *Medieval agriculture, the Southern French countryside, and the early Cistercians: a study of forty-three monasteries* (Philadelphia 1992); W. Janssen, 'Zisterziensische Wirtschaftsführung am Niederrhein. Das Kloster Kamp und seine Grangien im 12.-13. Jahrhundert', in W. Janssen & D. Lohrmann (eds.), *Villa, Curtis, Grangia: Landwirtschaft zwischen Loire und Rhein von der Romerzeit zum Hochmittelalter* (Munich, 1983), 205-11; C. Bouchard, *Cistercians, knights and economic exchange in twelfth century Burgundy* (London, 1991); C. Dekker, 'De komst van de Norbertijnen in het bisdom Utrecht', in *Ad Fontes. Opstellen aangeboden aan prof.dr. C. van der Kieft ter gelegenheid van zijn afscheid als hoogleraar in de middeleeuwse geschiedenis aan de Universiteit van Amsterdam* (Amsterdam, 1984), 167-87; G. Despy, 'L'exploitation des 'curtes' en Brabant du IXe siècle aux environs de 1300', in Janssen & Lohrmann (eds.) *Villa, Curtis, Grangia*, 185-204; H. Wiswe, 'Grangien niedersächsischer Zisterzienserklöster', *Braunschweigisches Jahrbuch*, 34 (1953), 7-134; F. Daelemans, 'De vorming van het domein van de Norbertijner abdij van Grimbergen (vanaf haar stichting tot ongeveer 1300)', *Eigen Schoon en de Brabander*, 61 (1978), 48-62; W. Rösener, 'L'économie cistercienne de l'Allemagne occidentale (XIIe-XVe siècle)', in *L'économie cistercienne: géographie – mutations du moyen âge aux temps modernes* (Auch, 1983), 135-56; C. Higounet, 'Le premier siècle de l'économie rurale cistercienne', in *Istituzioni monastiche e istituzioni canonicali in Occidente (1123-1215)* (Milan, 1980), 345-68; M. Untermann, 'Zur frühen Geschichte und Baugeschichte des Prämonstratenserstifts Knechtsteden bei Köln', *Jahrbuch der Rheinischen Denkmalpflege*, 33 (1989), 143-72; H. Janssens, *De premonstratenzer abdij van Averbode. Ontstaan en vroegste ontwikkeling* (Louvain, 1988); D. Lohrmann, 'Die Wirtschaftshöfe der Prämonstratenser im hohen und späten Mittelalter', in H. Patze (ed.), *Die Grundherrschaft im späten Mittelalter*, i (Sigmaringen, 1983), 205-240.

[709] GELA, AMtB 2, 1170, no. 68, fos 5v-6r.

abbey in various places around Buurmalsen.[710] Feasibly, he could even have had more than that, since there is nothing to say that he did not lease land from another institution or aristocrat, or perhaps even own land himself.

The Haag Spijk was still sub-divided into smaller plots in 1490, each averaging around 4 hectares, though by this time three-quarters of the plots were now consolidated into the hands of tenant farmer, Jan Wouterssoen, probably related to the aforementioned Wouter.[711] By the sixteenth century, the lease books show that Haag Spijk had been rearranged into a complete farm unit once again. In 1550, the farm was now leased under a complete entity to individual farmers, and was not sub-divided into different parcels.[712] It was during the sixteenth century that either a new farmhouse appeared at the Haag Spijk, or at the very least, an older inferior one was replaced or renovated into a larger and grander version. By the mid-century, it was described as a large farmhouse with a front and back house, a cellar, and glass windows. The costs of renovating the Haag Spijk in 1548 came to 477 *carolus* guilders, which was spent on materials such as wood, iron, stone, chalk, reeds, as well as the wage labour.[713] The high amount represents a long renovation process, probably equivalent to six years worth of wages payable to a carpenter. The farmhouse was also surrounded by other buildings such as sheds, haystacks, sheep pens, as well as a fruit and tree garden. The farmhouse was also situated on a '*terp*' (a raised mound), which was a phenomenon that spread across the Western Betuwe from the late fourteenth to the sixteenth century (after the dikes were built).[714]

The Haag Spijk is just one example, but illustrative of a general process. The same developments have been reconstructed from the manuscript sources for the isolated tenant farms of Treeft, Ganshoevel, De Woerd, and Dijstelcamp, to name just a few.[715] Many of the farms seemed to follow the same pattern of being important granges or *uithoven* in the twelfth and thirteenth centuries, being dismantled through leasing in the fourteenth and fifteenth centuries, and then re-emerging on the same locations in

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[710] *Idem*, no. 68, fos 5v-6v.

[711] *Idem*, no. 69, fo. 3.

[712] *Idem*, no. 73, fo. 177, no. 74, fos 133-4.

[713] *Idem*, no. 171.

[714] A. Bosschaert & P. Driessen, 'Terpen in de Neder-Betuwe en de Tielerwaard', *Historisch-Geografisch Tijdschrift*, 7 (1989), 10-17.

[715] For the Treeft see GELA, AMtB 2, 1170, no. 68, fo. 6r, no. 69; de Fremery (ed.), *Cartularium*, no. 363; GELA, AMtB 1, 0283, no. 9. For the Ganshoevel see de Fremery (ed.), *Cartularium*, nos 49, 51, 347; GELA, AMtB 2, 1170, no. 68, fo. 2, 6r, no. 73, no. 38; GELA, Oud Archief Tiel, 0001, nos. 852-7. For De Woerd, see de Fremery (ed.), *Cartularium*, no. 349; GELA, AMtB 2, 1170, no. 68, fos 1r-8r, no. 38. For the Dijstelcamp, see GELA, AMtB 2, 1170, no. 68, fo. 3v, no. 73.

the sixteenth century as tenant farms. The distribution of possible granges and tenant farms connected to Marienweerd is shown on the map below. These elements of continuity and discontinuity in farms have already been discussed for other parts of Europe, such as the sharecropping *poderi* which often emerged on the previous relics of manorial *curtes* and granges.[716]

Who were these tenant farmers who occupied these new farms, and what kind of farms did they manage? A lot of information needed to answer these questions has been gathered through the researches of Bas van Bavel. He has shown that the farms of the Western Betuwe in the sixteenth century were highly commercialised, had high levels of capital investment, and supported very labour extensive modes of exploitation.[717] Very little surplus was lost in taxation (with the exception of river rolls exacted by territorial lords),[718] which meant more could be directed back into investments in the farms. Much of the surplus was also used to improve the hydraulic works, especially in the construction of drainage mills. The enclosure of land into coherent units, furthermore, reduced transportation and storage costs for products and materials, and less time was wasted travelling between plots. These sorts of costs were important considerations for agricultural production in the western parts of the river area: the abbey of Marienweerd acquired a number of strategically-placed 'stadshoven' in the towns of Culemborg, Zaltbommel, Grave, and Keulen, to store surplus produce.[719]

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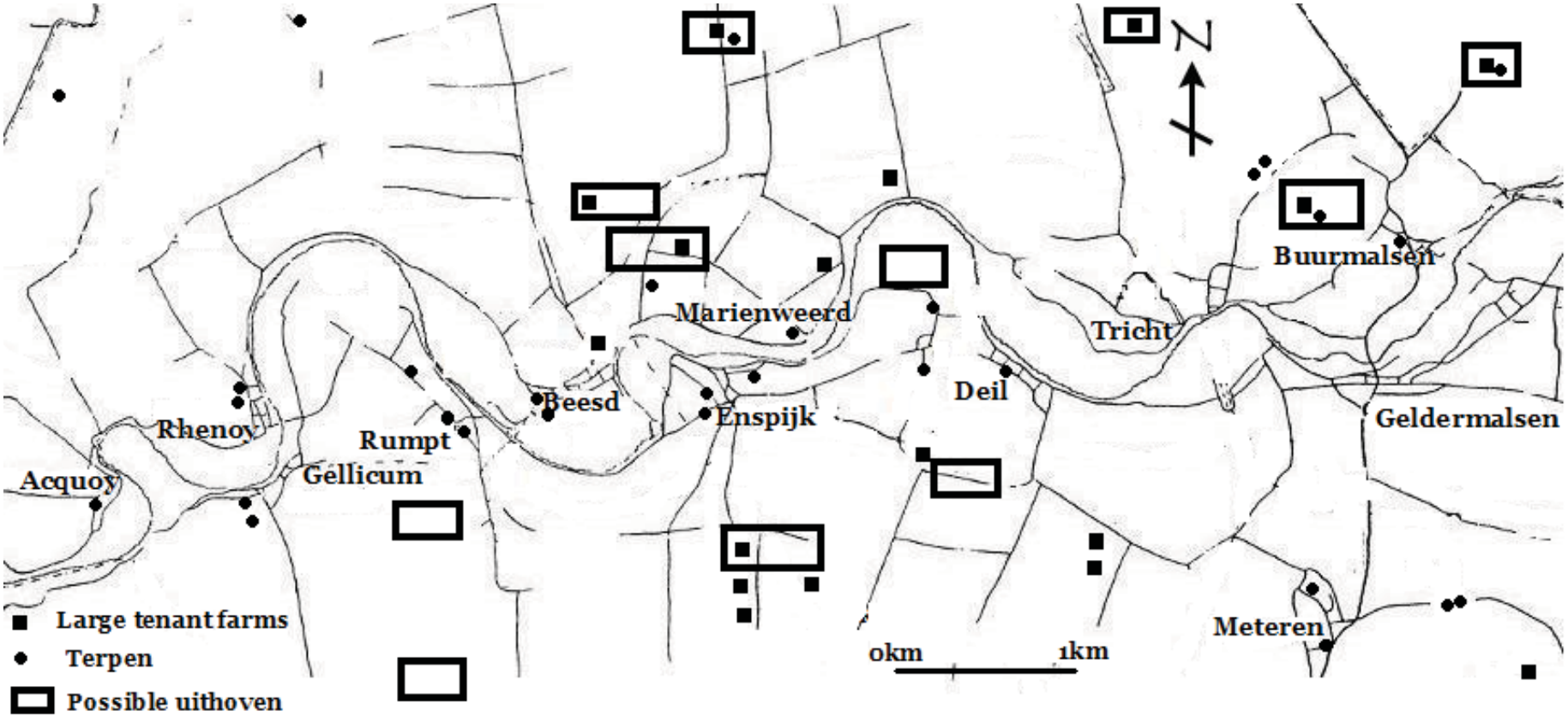
[716] Comba, 'Le origini medievali'; 'La dispersione dell'habitat'.

[717] See, in general, van Bavel, 'Land, lease and agriculture'.

[718] J. Weststrate, *In het kielzog van moderne markten. Handel en scheepvaart op de Rijn, Waal en Ijssel, ca. 1360-ca. 1560* (Hilversum, 2008), 106-7; J. Westermann (ed.), *De rekeningen van de landsheerlijke riviertollen in Gelderland, 1394/1395* (Arnhem, 1939), 49-88. Other rights of the Duke of Gelders listed in R. van Schaïk, 'Taxation, public finances and the state-making process in the late Middle Ages: the case of the Duchy of Guelders', *Journal of Medieval History*, 19 (1993), 263.

[719] B. van Bavel, 'De stadshoven van de Norbertijner abdijen tijdens de late middeleeuwen en het begin van de nieuwe tijd: een beknopte inleiding', in S. van de Perre (ed.), *De stadshoven: refuge, overslagplaats en stedelijke residentie. Verslagen van de contractdag van de werkgroep Norbertijnse geschiedenis in Nederland* (Utrecht, 1995), 9-26; 'Schakels tussen abdij en stad. De stadshoven van de norbertijner abdijen in de Nederlanden (ca. 1250 – ca. 1600)', *Analecta Praemonstratensia*, 76 (2000), 133-57. See, for example, GELA, AMtB 2, 0170, no. 106.

Figure 5.5 Distribution of Marienweerd *uithoven* (1350) and locations of large tenant farms (sixteenth century) in the Western Betuwe



Farms on the lighter soils on the higher lands closer to the Linge River were more suited to arable cultivation, however, many of the tenant farms away from the older-cultivated lands supported a pastoral economy instead. Even those that did pursue arable farming, did so with an emphasis on fodder crops and oats, in effect subservient to the pastoral sector.[720] Van Bavel has shown using accounts and tithe registrations[721] that in 1364, only approximately a third of the agricultural land in the Land van Culemborg was used as arable, and by 1450 this had declined to as much as 19 percent of the total. Similarly, in the Ambt of Beesd and Rhenoy and the Tielerwaard, 48 percent of the total land was arable in 1364, but this had decreased in 1400 to 37 percent.[722] The conversion from arable to pastoral farming during the fourteenth and fifteenth centuries was at its highest level in the lower-lying marshes, where the heavy soils and poor drainage made ploughing very difficult. Thus, many of the tenant farms of the sixteenth century opted to move towards more extensive forms of agriculture, by grazing animals. High prices were being paid for animal and dairy produce in the sixteenth century; not only grains. The western parts of the Dutch river area became a prominent area for horse breeding and ox-fattening in the fifteenth and sixteenth centuries, while large farmers with sufficient capital invested in orchards necessary for market-orientated fruit-production.[723] Farmers took advantage of the local markets for horses, cattle, and oxen, which developed in the nearby towns and villages of Beusichem, Culemborg, Nijmegen, Tiel, and Zaltbommel, from the second half of the fifteenth century onwards.[724] Another form

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[720] P. Hoppenbrouwers, 'Agricultural production and technology in the Netherlands, c. 1000-1500', in Astill & Langdon (eds.) *Medieval farming and technology*, 99-101.

[721] Although scholars have recently urged caution with the use of tithes for ascertaining agricultural productivity. See G. Dejongh & E. Thoen, 'Arable productivity in Flanders and the former territory of Belgium in a long-term perspective (from the Middle Ages to the end of the Ancien Régime)', in van Bavel & Thoen (eds.), *Land productivity and agro-systems*, 33; B. Dodds, 'Estimating arable output using Durham Priory tithe receipts, 1341-1450', *Economic History Review*, 57.2 (2004), 254-7; *Peasants and production in the medieval North-East: the evidence from tithes, 1270-1536* (Woodbridge, 2007), 6-8.

[722] B. van Bavel, 'A valuation of arable productivity in the central part of the Dutch river area, c.1360-1570', in van Bavel & Thoen (eds.), *Land productivity and agro-systems*, 305-6.

[723] van Bavel, 'Land, lease and agriculture', 35-6.

[724] On markets in the Betuwe, see J. Benders, 'Item instituimus ibidem singulis annis nundinas. Fairs in the principality of Guelders, 1294-1543', in S. Cavaciocchi (ed.), *Fiere e mercati nella integrazione delle economie Europee secc. XIII-XVIII* (Prato, 2000), 649-51, 664-5; J. den Hoed, 'Beschouwingen rond de Culemborgse stadsrechtbrief van 1318', *Spiegel der Historie*, 3 (1968), 349-50. On the development of specifically horse-fairs from the late fourteenth century onwards in the river area, see Dijkman, *Shaping medieval markets*, 60-1.On specifically horse-markets in the Betuwe, see van Bavel,

of extensive agriculture which developed in the late Middle Ages was the exploitation of duck decoys (to trap ducks)[725], which only could be constructed by large farmers with sufficient capital.[726]

5.4 Polarisation and the decline of the village communities

While a new group of prosperous tenant farmers had emerged in the western parts of the river area by the sixteenth century, who lived in large grandiose farmhouses away from the main settlements, this had negative repercussions for the concentrated villages lining the Liner River. Indeed, these villages began to suffer demographic stagnation and outward migration. The emergence of a market in short-term leases had changed the 'rules of the game' in the Western Betuwe, creating a divergence between those who played the game well and those who played it poorly.

Except for the rural nobles who lived in fortified residences or castles located within the villages, generally the inhabitants of the villages were poorer than the tenants occupying the isolated farmhouses. Indeed, these were the losers from the great economic changes which had occurred during the fifteenth and sixteenth centuries. Some of the villagers had access to lease land, but unlike the tenant farmers with the large farmhouses, these tenants had not been able to or not wished to organise it into coherent units. For example, Hubert Jansen lived near Bulkestein castle in the centre of Deil in 1550,[727] and worked a number of scattered holdings in different fields across the territory of Enspijk.[728] Similarly, rural folk such as Alert Arnt, Gilbert Dirks, Derk Derks, and Adriaan Bongte of Enspijk, Jacob Coulbens of Deil, and Jan Arnt and Jan Bolke of Tricht, all lived inside the villages and worked small plots distributed randomly across the parishes.[729] Many of the villagers held

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Goederenverwerving, 450-1; F. van den Hombergh, 'Brugman en de broodnijd: problemen rond de Culemborgse paardenmarkt', *De Drie Steden*, 8 (1987), 3-9.

[725] For how they worked in the river area, see B. van Bavel, 'Eendenkooien in het Hollandse en Gelderse rivierengebied. Aanleg en vroegste exploitatie', *Historisch-Geografisch Tijdschrift*, 20 (2002), 16-20; M. van Tielfhof, 'Eendenkooien in Rijnland in de vroegmoderne tijd', *Tijdschrift voor Waterstaatsgeschiedenis*, 13 (2004), 47-59.

[726] See GELA, Waardenburg, no. 584; Nassause Domeinen, no. 148, fo. 231r; ORA Deil, no. 1089, fo. 141v. Many of these decoys were found in the lower-lying marshes such as the area of Beesd known as 'Over de Graaf', some belonging to hereditary leasers of the Convent of Mary Magdalene at Wijk bij Duurstede. See RAR, Archief Dijkstoel Beesd, 1552-1838, Verpondingen over Beesd 1690, no. 26.

[727] For the castle of Bulkestein, see G. de Kruijff, 'Willem van Tuyll van Bulckesteyn: een mooi portret', *Mededelingen van de Historische Kring West-Betuwe*, 25.2 (1997), 34.

[728] GELA, AMtB 2, 1170, no. 73, fos 8-10.

[729] *Idem*, no. 68, fos 4r-9, nos 69, 73.

very little land by the sixteenth century, epitomised by the example of Jan Jansch who held just one hectare in the Ridderslag, north of Beesd, and resided in a house at the end of the main street in Enspijk village.

The villages were also inhabited in the sixteenth century by people who did not even appear in the lease books. As a result of the polarisation in the distribution of lease land caused by consolidation, many villagers did not even have access to one morsel of land. While a selected few farmers benefited from the short-term lease, the fluid and flexible transfer of land, and favourable prices for agricultural goods, their success was to the detriment of the majority. As large tenant farmers consolidated their lands into coherent units, this accumulation of land came at the expense of the medium-sized and small farmers, many of whom lost all access to the means of production and became proletarianised. The average size of lease holdings doubled from 7 hectares in 1442 to 14 hectares in 1580, while the number of actual leaseholders decreased from 152 in 1530 to 93 in 1580. In 1442, there were no tenant farmers with more than 40 hectares but by the end of the sixteenth century there were around 100 in the western river area as a whole.[730] The proportion of land farmed in large units was even higher than what the lease books suggest as well, given that middle-sized nobles and religious institutions such as Zennewijnen (68 hectares) continued to exploit some farms directly.[731]

The villages responded poorly to the economic polarisation of the sixteenth century, showing signs of demographic contraction and stagnation over the long term. Although no absolute population figures exist for the region prior to the Black Death, in line with simultaneous developments elsewhere in Western Europe, it is likely that the Western Betuwe experienced demographic growth in the high Middle Ages and reached a population plateau towards the beginning of the fourteenth century, perhaps ending with the 'great death' mentioned by chroniclers of the period in reference to the plagues of 1316.[732] Population declined through the fourteenth century, although figures from the Tielerwaard suggest that between 1382 and 1470 population recovered by around 17 percent. This recovery is curious given the mid-fifteenth century was a time of well-documented plagues in the Dutch river

[730] van Bavel, *Marienweerd*, 396.

[731] B. van Bavel, *Transitie en continuiteit: de bezitsverhoudingen en de plattelands-economie in het westelijke gedeelte van het Gelderse rivierengebied, ca. 1300 – ca. 1570* (Hilversum, 1999), 575.

[732] With particular reference to Gelderland, see A. Meister (ed.), 'Niederdeutsche Chroniken aus dem XV. Jahrhundert', *Annalen des Historischen Vereins für den Niederrhein*, 70 (1901), 51. As well as neighbouring Xanthen along the Rhine into Germany, see P. Weiler (ed.), *Urkundenbuch des Stiftes Xanten, (vor590)-1359*, i (Bonn, 1935), no. 462.

area.[733] It may be that this was linked to the decline of serfdom and the manorial system and the proliferation of the short-term lease, giving a wider portion of inhabitants access to their own piece of land. Nonetheless, between 1470 and 1630/50, population once again tumbled to a lower level than it was in 1369, unsurprisingly occurring simultaneous to economic polarisation in the region. This demographic decline in the transition from the late Middle Ages to the early modern period was mirrored in nearby regions such as the Bommelerwaard and the Neder-Betuwe.[734]

Table 5.1 Population trends for the Tielerwaard in the Dutch river area

Year	Population	Population ratio
1369	5835	100
1382/94	5429	93
1470	6385	109
1630/50	5485	94
1770	6161	106
1795	7586	130
1809	8468	145

Source: R. van Schaik, *Belasting, bevolking en bezit in Gelre en Zutphen, 1350-1550* (Hilversum, 1987), 273-7.

Land polarisation was not solely to blame for the contraction of the villages along the Linge River in the sixteenth century. The negative effects of widespread land-loss was exacerbated by three key factors, all of which helped stimulate a trend of migration away from the region. The first factor was the general lack of employment opportunity in the western parts of the Dutch river area.[735] Once small farmers lost their lease land, their only options were to work for the large tenant farmers as wage labourers.[736] Local inhabitants could have found work in the

[733] Referred to in W. Blockmans, 'The social and economic effect of the plague in the Low Countries ', *Revue Belge de Philologie et d'Histoire*, 58 (1980), 833-63.

[734] P. Brusse, *Overleven door ondernemen. De geschiedenis van de Over-Betuwe 1650-1850* (Wageningen, 1999), 28-32; E. Hofstee, 'Groei van de bevolking vanaf 1795', in H. De Bruin (ed.), *Het Gelders rivierengebied uit zijn isolement: een halve eeuw plattelandsvernieuwing* (Tiel, 1988), 42-55.

[735] B. van Bavel, 'Proto-industrie tussen de Gelderse rivieren? Een eerste verkenning naar de niet-agrarische, marktgerichte activiteiten op het platteland van het Gelderse rivierengebied, 1300-1600', *Bijdragen en Mededelingen Vereniging Gelre*, 93 (2002), 55-78.

[736] The significance of which emphasized in two important articles. B. van Bavel, 'The transition in the Low Countries. Wage labour as an indicator of the rise of capitalism in the countryside, 14th-17th

Marienweerdse Veld which was partly retained as demesne into the sixteenth century, but in total this provided employment for just 25 fixed contract workers, 25 temporary workers for the harvest, and 20 single-day workers for times outside the harvest.[737] Rural folk ended up perilously close to the margins necessary for basic subsistence, not only because the wages in the fifteenth and sixteenth centuries were very low, but the large tenant farmers pursued very capital intensive but labour extensive methods of farming.[738] Quite simply, there was not enough work to go round, and this was exacerbated by tenant farmers securing labour from migrant workers from up to 150 kilometres away in parts of Overijssel, who were more liable to accept lower wages.

Proletarianisation does not always result in outward migration however (as seen in the Oldambt case in chapter seven), particularly when large sections of society can eek out a living in alternative pursuits. The impoverished labourers of the Oldambt in east Groningen were able to get by through cultivation of small plots of potatoes and earning a day's wage peat digging in the Veenkolonien.[739] Loosely related to this theme is Erik Thoen's portrayal of a 'commercial-survival' economy in late medieval inland Flanders, where smallholders could maintain themselves through a variety of intensive agricultural and proto-industrial activities, whereby the surpluses sold at market were just enough to guarantee peasant levels of subsistence.[740] The inhabitants of the Western Betuwe did not have the same variety of options, however. Indeed, opportunities for the inhabitants of the western parts of the Dutch river area look particularly scanty when compared to the rural regions of neighbouring Holland. In Holland, rural folk compensated for the worsening of agricultural conditions (such as soil subsidence) by occupying themselves with a number of non-agricultural activities including reed and peat-cutting,[741] sweet water fishing,[742] fowling, eel fishing,[743] salt making, ship building,[744] water transport, brick

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centuries', in P. Coss, C. Dyer, & C. Wickham (eds.), *Rodney Hilton's Middle Ages: an exploration of historical themes* (Oxford, 2007), 286-303, esp. 295-6; 'Rural wage labour'.

[737] van Bavel, *Marienweerd*, 436-42.

[738] van Bavel, 'Land, lease and agriculture', 35-9.

[739] See O. Knottnerus, 'Land kanaan aan de Noordzee: een vergeten hoofdstuk' in J. Elerie & P. Hoppenbrouwers (eds.), *Het Oldambt, deel 2. Nieuw visies op geschiedenis en actuel problemen* (Groningen, 1991), 27.

[740] Thoen, 'A commercial survival economy'.

[741] B. Ibelings, 'Turfwinning en waterstaat in het Groene Hart van Holland voor 1530', *Tijdscrift voor Waterstaatgeschiedenis*, 5 (1996), 74-80.

[742] D. de Boer, 'Roerende van der visscheryen. Enkele aspecten van de visvangst in Holland en Zeeland tot der Sint Elisabethvloed van 1421', in J. Beenakker et al. (eds.), *Holland en het water in de*

making,[745] spinning and weaving,[746] brewing,[747] labouring on the dikes and ditches[748], as well as a move towards new forms of dairy production.[749] In fact, in the early sixteenth century, only 41 percent of rural labour output in Holland was 'agricultural', a strikingly small amount for a pre-industrial society.[750] As well as an absence of proto-industries in the Western Betuwe, there was no sign of intensive production of industrial crops such as flax, or hops, which were produced on small peasant plots in Holland and inland Flanders.[751] The lack of options for the inhabitants of the Western Betuwe made outward migration more likely.

Secondly, the decline of the village communities in the Western Betuwe was likely linked to the commercial development seen in Holland from the Middle Ages into the early modern period; effectively acting as a magnet for those in the river area who had lost their land or could not find work, and thus sought out new opportunities. The reclamation of the Vijfheerenlanden between the eleventh and thirteenth centuries (separated from the Western Betuwe by the Diefdijk) and the peat lands of South Holland in general, attracted many new settlers from the river area. Peasant colonisers were enticed by territorial lords such as the Bishop of Utrecht and the Count of Holland offering property and freedoms, possibly two great

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middeleeuwen. Strijd tegen het water en beheersing en gebruik van het water (Hilversum, 1997), 115-40.

743 P. van Dam, *Vissen in veenmeren. De sluisvisserij op aal tussen Haarlem en Amsterdam en de ecologische transformatie in Rijnland 1440-1530* (Hilversum, 1998).

744 R. Unger, *Dutch shipbuilding before 1800: ships and guilds* (Assen, 1978).

745 J. Hollestelle, *De steenbakkerij in de Nederlanden tot omstreeks 1560* (Assen, 1961).

746 H. Kaptein, *De Hollandse textielnijverheid 1350-1600. Conjunctuur & continuiteit* (Hilversum, 1998).

747 R. Unger, *A history of brewing in Holland, 900-1900: economy, technology, and the state* (Leiden, 2001).

748 P. van Dam, 'Digging for a dike. Holland's labor market ca. 1510', in Hoppenbrouwers & van Zanden (eds.), *Peasants into farmers?,* 220-56. For the best general work on proto-industry in Holland see van Zanden, 'A third road to capitalism?', in *Idem*; *Arbeid tijdens het handelskapitalisme*, chp 1.

749 B. van Bavel & O. Gelderblom, 'The economic origins of cleanliness in the Dutch Golden Age', *Past & Present*, 205.1 (2009), 55-6. See the expansion of dairy markets in late-medieval Holland and the formalisation of measures and regulations in W. Knapp, *Botercontrole in Nederland: de geschiedenis van de Nederlandsche botercontrole in verband met de boterwetgeving en –handel* (Schiedam, 1927), 3-7.

750 van Zanden, 'Taking the measure'.

751 B. van Bavel, 'Landbouw, bosbouw en visserij', in J. Stinner & K-H, Tekath (eds.), *Gelre, Geldern, Gelderland. Geschiedenis en cultuur van het hertogdom Gelre* (Geldern, 2001), 261-7; B. Slicher van Bath, 'The rise of intensive husbandry in the Low Countries', *Britain and the Netherlands* (London, 1960), 136-7, 148-9; J. Bieleman, *Geschiedenis van de landbouw in Nederland, 1550-1950* (Amsterdam, 1992), 56-76.

attractions for heavily burdened serfs in the Betuwe.[752] More curious, however, was the unusual population trends of the Holland peatlands, which (although probably affected in the short-term by the Black Death) continued to rise during the fourteenth and fifteenth centuries, quite anomalous to what was going on in Europe during the period.[753] Population figures only started to level off towards the end of the sixteenth century in Holland.[754] The continuing rise in population in Holland between 1300 and 1550 may have been linked to inward migration, and many of these migrants may have come from the Betuwe, particularly destitute wage labourers of the sixteenth century.

Despite the lack of proto-industry or alternative opportunities for employment in the Western Betuwe, migrants did not necessarily look for proto-industrial work in the Holland countryside. Impoverished wage labourers almost certainly looked towards the towns and cities instead, which is logical given the early and strong urbanisation experienced in Holland.[755] Indeed, Dick de Boer has already noted that the increasing population of Holland during the late Middle Ages and into the early modern period can be attributed to the swelling of the towns, and furthermore suggesting that these people came from the surrounding countryside, particularly given the problems with peat subsidence.[756] In the words of Jan de Vries, "the fact that the urbanisation of this era expressed itself more in the large number of cities rather than in their large size speaks to the importance of the push force of rural crisis relative to the pull of vigorous urban economies".[757]

A third factor for the decline of the village communities in the Western Betuwe in the age of economic polarisation was the absence or loss of welfare systems that the rural poor could fall back on. Common land never played a dominant role in the economy of the river area during the Middle Ages (especially in comparison to parts of the east such as Drenthe or Overijssel), but it was not completely absent either.[758] At the beginning of the fourteenth century, there was

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[752] van der Linden, *De cope;* 'Het platteland', 48-82, esp. 73-8.

[753] For population movements in the Holland peatlands see B. van Bavel, 'Population and land: rural population developments and property structures in the Low Countries, c.1300-c.1600', *Continuity & Change*, 17.1 (2002), 9-37; van Bavel & van Zanden, 'The jump start of the Holland economy'.

[754] van Zanden, *The rise and decline of Holland's economy*, 35-40.

[755] On the growth of the towns, see P. Lourens & J. Lucassen, *Inwonertallen van Nederlandse steden ca. 1300-1800* (Amsterdam, 1997), 100-23.

[756] de Boer, *Graaf en grafiek*, 211-45.

[757] de Vries & van der Woude, *The first modern economy*, 19.

[758] The areas of the Low Countries where common land was important is shown in P. Hoppenbrouwers, 'The use and management of commons in the Netherlands. An overview', in De Moor et al. (eds.), *Management of common land*, 88–112.

around two percent of land under common ownership in the western parts of the river area, since a large proportion had already been parcelled out into private ownership before documents started making more explicit references to it.[759] There were two types of common land in the Western Betuwe.[760] The first was the land totally unsuitable for arable cultivation in the low-lying marshes, well away from the Linge River, and this was often used for the pasture of animals. The second was the communal operation of the arable complexes close to the villages, particularly in the Land van Buren. In the villages of Buren, Beusichem, and Erichem, there was a combined 85 hectares distributed between them, divided up into three small arable fields, and this lasted well into the seventeenth century when it was finally usurped by higher status landowners such as the Count of Buren.[761] The villages of Buurmalsen and Tricht do not have the same documentary evidence for the commons, probably because they were parcelled out a lot earlier. Nonetheless, the enduring presence of a central green (curiously existing simultaneously with a stretched form in some cases, e.g. Enspijk) in some of the villages in the Western Betuwe suggests that the same system of commons evident in Buren and Beusichem also had previously existed elsewhere – it just disappeared earlier.

The presence of commons in some areas of the Betuwe probably formalised the crystallisation of settlement in concentrated villages during the Middle Ages. Inhabitants resided around the edges of centrally-placed greens which had communal functions, and in fact, a precondition of entry into the system was ownership of one of the houses which was tied to old inheritance rights.[762] The early disappearance of this system in much of the river area, or at least the continual encroachment onto the commons during the fourteenth to sixteenth centuries, likely facilitated the shrinkage of the villages in the transition into the early modern period.

[759] Reference to small pieces of common land are still found in the western parts of the river area, however, even as late as the seventeenth century. For example, GELA, Familie Pieck, 0480, no. 46.

[760] van Bavel, *Transitie*, 274-8.

[761] A. Koch & A. Maris, 'Meentgenootschappen in Land van Buren', *Bijdragen en Mededelingen Vereniging Gelre*, 49 (1949), 193-4.

[762] See the map at Erichem in RAR, Oud Archief Buren, 0692, no. 743. Some inhabitants had to get permission to build on the commons. See *Idem*, no. 747. Examples of houses pictured below with names of commoners.

The safety net of the communities disintegrated, and when added to the inadequate levels of wage work available, the polarised access to lease land, the lack of proto-industries, and the opportunities arising in Holland, inhabitants undoubtedly had no option but to move away from the river area. Some local inhabitants began to protest to magistrates at their exclusion from the commons, however, the large landowners of the Betuwe had little interest in sustaining a peasant economy, speeding its eventual decline.[763]

5.5 Persistent institutions

Economic polarisation in the Western Betuwe contributed towards two simultaneous settlement developments. While on the one hand, there developed a series of large grandiose farmhouses located away from the villages and occupied by successful tenant farmers, the other side of the coin was stagnant, declining, and impoverished village communities. The emergence and proliferation of the short-term lease had a large role to play in this economic polarisation, however, a question still remains – why did this happen from the late Middle Ages onwards? What allowed these changes to occur? In this section, it is argued that although leasing and the rearrangement of landholding in the western parts of the river area were crucial in creating the settlement divergence described, this was only possible on the back of some very strong and persistent institutional structures.

[763] *Idem*, no. 746.

A: Rapid decline of the manorial system before 1300

In the high Middle Ages, the Dutch river area was highly manorialised. However, signorial jurisdictions began to wane in the thirteenth century, and for example, the abbey of Marienweerd had trouble controlling 70 men on their manor at Zoelmond in 1259, who refused to accept their serf status and deserted.[764] By 1300, manorialism had almost completely vanished, and bipartite manors with dependent serfs had disappeared.[765] Thus, despite being a region of strong manorialism, these structures came to a quick and abrupt end.

The decline of the manorial system had importance consequences for the early emergence of clear, inalienable property rights in the Western Betuwe, something which encouraged the development of leasehold in the fourteenth century. If the manorial system would have lingered on in the river area, there would have been many more institutional and organisational obstacles to the simple transfer of land between parties. In heavily manorialised societies, private 'land ownership' was not really possible. People did not 'own' land, they merely had access to a package of rights, benefits, and obligations associated with it. Often there were multiple stakeholders in one piece of land, thus adding an extra obstacle to its potential transfer between parties. Furthermore, in the manorial context, land transfer tended to be only conducted with the prior permission of the signorial lord, particularly with the holdings of unfree tenants such as serfs. Until the thirteenth century, it was in theory actually forbidden to sell an estate in fiefdom in many parts of Western Europe.[766] The payment of a fee to the lord on the transfer of the land was another institutional obstruction, and occasionally lords blocked transfers altogether.[767] In sum, the absence of clear property rights tended to hinder the free transfer of land holdings, and certainly the consolidation of land holdings.[768]

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[764] van Bavel, *Marienweerd*, 227-8. Fleeing serfs were common in thirteenth-century Europe. For a comparative example, see E. Jones, 'Some Spalding priory vagabonds of the 1260s', *Historical Research*, 73 (2000), 93-104.

[765] van Bavel, *Manors and markets*, 86; J. Kuys, 'Dagelijkse heerlijkheden in de Bommeler- en Tielerwaard tot omstreeks het midden van de zeventiende eeuw', *Bijdragen en Mededelingen Vereniging Gelre*, 70 (1978/9), 3.

[766] L. Genicot, *L'économie rurale Namuroise au Bas Moyen Age*, i (Louvain, 1974), 125-59.

[767] R. Opsommer, *'Omme dat leengoed es thoochste dinc van der weerelt': het leenrecht in Vlaanderen in de 14de en 15de eeuw* (Brussels, 1995), 422-7.

[768] All of which suggested in van Bavel, 'The organisation and rise of land and lease markets'; 'The emergence and growth of short-term leasing'.

The abrupt disappearance of manorialism in the Western Betuwe paved the way for the establishment of clear, inalienable property rights, which were informed by the slow infiltration of Roman law.[769] The disparity between the tenant farmers of the large farmhouses and the wage labourers of the stagnant villages may have been caused directly by the emergence of a market in short-term leases, but this was only possible on the back of the very rapid decline of manorial structures and complex and overlapping property rights.

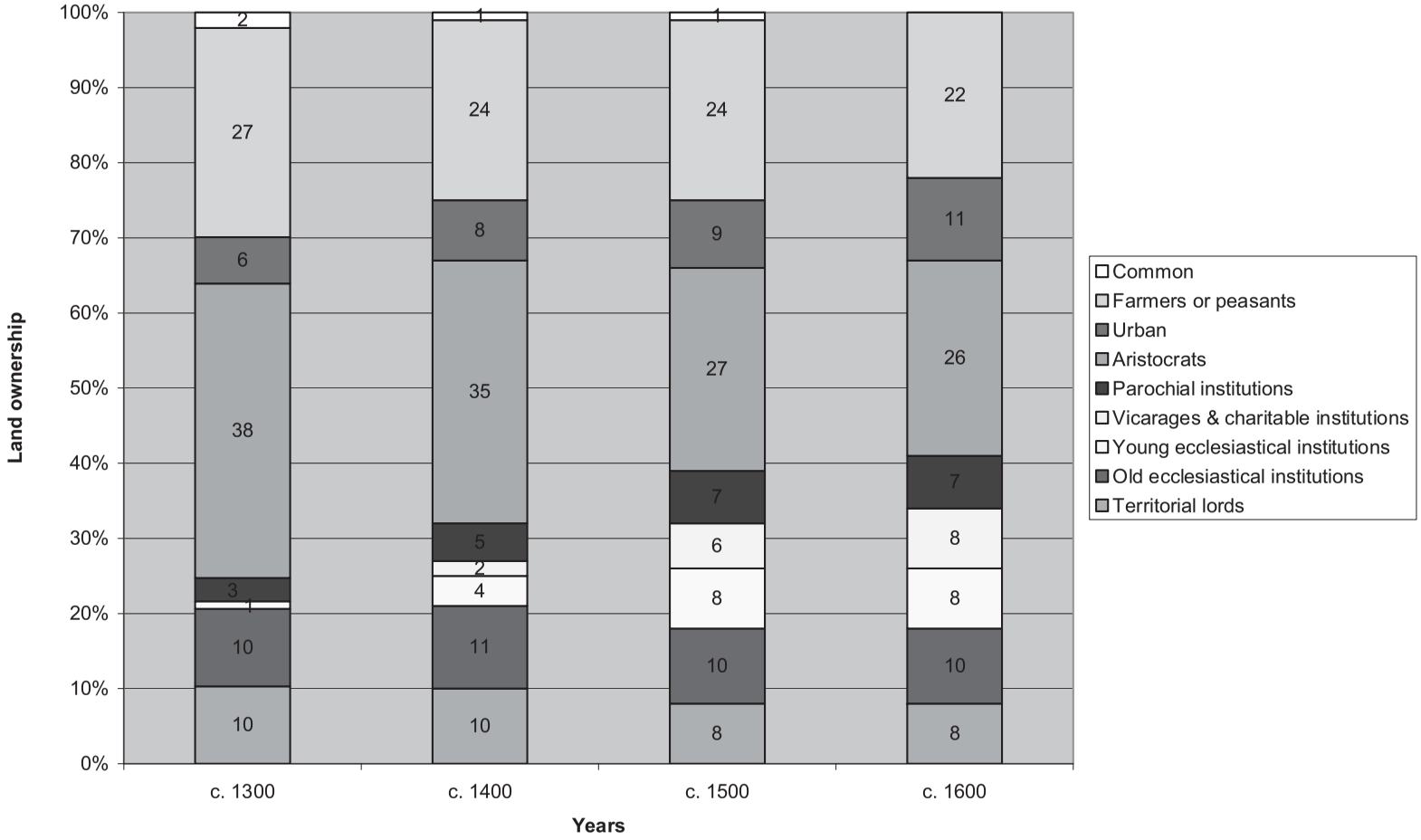
B: The entrenched property structures

By the late Middle ages in many areas of Western Europe, land was being transferred between parties more freely, leading to social and economic stratification in the countryside, as some peasants and tenants began to accumulate land, often at the behest of their neighbours.[770] Upon the decline the manorial system in the western part of the river area, however, this did not happen – land ownership barely changed at all. In fact, it remained proportionally in the hands of the same social groups over a number of centuries. A fluid and flexible market in land did not emerge in the river area. Between 1100 and 1300, ecclesiastical institutions such as the abbey of Marienweerd obtained vast amounts of land through concession by noble families and purchase, yet after 1300, very little change occurred in the structure of landownership. Land was actually very immobile, and a sale was made only every 45 to 55 years on average, which is a much lower turnover of land than for leasehold, where land went up for lease every 6 to 10 years.

[769] A. de Blécourt, *Kort begrip van het oud-vaderlands burgerlijk recht* (Groningen, 1950), 174-96.

[770] A large literature, but see in particular, R. Hilton, *The decline of serfdom in medieval England* (London, 1969), 171-8; Duby, *L'économie rurale*, 524, 591; Bois, *Crise du féodalisme*; Campbell, 'Population change and the genesis of commonfields, 190; B. Campbell & M. Overton, 'A new perspective on medieval and early modern agriculture: six centuries of Norfolk farming c. 1250- c. 1850', *Past & Present*, 141 (1993), 53; P. Kriedte, 'Spätmittelalterliche Agrarkrise oder Krise des Feudalismus?', *Geschichte und Gesellschaft*, 7 (1981), 61-2.

Figure 5.6 Social distribution of landownership in the western part of the river area, 1300-1600 (%)



Adapted from: van Bavel, *Transitie*, 427.

Over a long period of 250 years, and during a time of great social and economic upheaval in Western Europe, land in the Western Betuwe continued to be distributed unequally in the hands of certain social groups; these being the large ecclesiastical institutions (like Marienweerd), local aristocratic families, and then to a lesser extent, territorial lords and the urban bourgeoisie or institutions. Peasants and farmers in the western parts of the river area owned only between a fifth and quarter of land in period 1300 to 1550. A more detailed property breakdown for the mid-sixteenth century is shown below.

Table 5.2 Social distribution of landownership in the western part of the river area, mid-sixteenth century (%)

	Surface (h)	**Territorial lords**	**Old ecclesiastical institutions**	**Young ecclesiastical institutions**	**Vicarages & charitable institutions**	**Parochial institutions**	**Aristocrats**	**Urban**	**Peasants or farmers**
Land van Culemborg (West)	994	2	0	3	9	4	13	16	53
Land van Culemborg (East)	2010	33	4	9	14	3	11	24	2
Ambt Beesd & Rhenoy	2328	1	36	5	2	4	37	1	14
Tielerwaard Linge	4164	2	13	13	7	8	33	7	17
Tielerwaard Waal	6565	0	2	6	9	10	29	14	30
Land van Buren	4759	18	12	9	7	6	20	8	20
Total	**20820**	**8**	**10**	**8**	**7**	**7**	**26**	**11**	**22**
Total (excluding LvC)	**17816**	**5**	**12**	**8**	**7**	**8**	**29**	**9**	**22**

Source: van Bavel, *Transitie*, 392.

However, landownership in the Land van Culemborg did not conform to the general pattern seen in the western parts of the Dutch river area. Therefore, another set of results have been provided above, which exclude the Land van Culemborg figures. The very western parts of the Land van Culemborg is actually outside of the research area anyway, and furthermore, it had characteristics more similar to South Holland (before 1570), such as high levels of peasant ownership of land (over half the total) and no tradition of manorial organisation of agriculture.[771] The high peasant landownership to the west of the Betuwe in the Vijfheerenlanden and Holland has been shown by various scholars using taxation records such as the '*tiende penning*'.[772]

Between 1300 and 1550, land ownership in the Western Betuwe was not only skewed (a limited amount of rural peasant land ownership), but skewed over the long-term. The dominance of large landowners in the area was effectively locked-in for a number of centuries. Furthermore, the large landowners which dominated the Western Betuwe in 1550 were roughly the same social groups which dominated the area before 1300, when agriculture was still organised under a manorial system. Despite the decline in formalised signorialism and serfdom, the former manorial lords and large ecclesiastical institutions did well to hold onto their land during this period of change. It was only at the end of the sixteenth century that, for example, Marienweerd began to sell-off its lands in earnest.[773] The only significant change over the long term was a small decline in aristocratic landownership, which was taken up by new ecclesiastical institutions such as the Kruisbroeders monastery at Asperen.[774]

The long stability in effectively polarised land ownership contributed to the divergent settlement developments in the western Dutch river area in two key ways. First, the strong manorial system before 1300 helped crystallise the series of villages straddling the Linge River.[775] A classic association has always been made between scattered distribution of arable plots (such as in a open field system), manorialisation, and concentrated villages.[776] It was originally thought that the

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[771] de Vries & van der Woude, *The first modern economy*, 159-65.

[772] See, for example, W. Diepeveen, *De vervening in Delfland en Schieland tot het einde der zestiende eeuw* (Leiden, 1950), 57-65; H. van Gelder, *Nederlandse dorpen in de 16de eeuw* (Amsterdam, 1953).

[773] See, for example, GELA, Familie Pieck, 0480, nos 53-4. Also A. Maris, *De reformatie der geestelijk en kerkelijke goederen in Gelderland* (The Hague, 1939), 216-7.

[774] R. van Maanen, 'Het Kruisbroedersklooster te Asperen en haar Tielerwaardse landerijen in 1636-1647', *Genealogisch Tijdschrift* (2000), 27-31.

[775] As alluded to in C. Dekker, *Het Kromme Rijngebied in de middeleeuwen: een institutioneel-geografische studie* (Utrecht, 1983), 31-8; W. van Es, J. van Doesburg & I. van Koningsbruggen, *Van Dorestad naar Wijk bij Duurstede. Het ontstaan van een stad ca. 600-1500 na Chr.* (Abcoude, 1998), 34-43.

[776] van Bavel, *Manors and markets*, 94.

classic bipartite manor of large demesne and associated serf tenements was completely absent in the Low Countries (especially in the north), though recent work had done much to dispel that notion, and they certainly were present in the Dutch river area.[777] In fact, the manors of the Western Betuwe were a mixture of bipartite arrangements (although there were numerous variations in its form and organisation) and '*type dispersé*', which was a small demesne with scattered tenant properties.[778] The demesnes in the early and high Middle Ages in the Western Betuwe were directly exploited using a combination of wage labour (particularly on the granges of the ecclesiastical institutions) and unfree serfs. In order to make this system work, the serfs were given land to support themselves, which tended to be scattered plots in the open fields (on the highest lands), close to the villages. The remains of these complexes are still visible in the landscape today, and have turned up considerable amounts of early medieval pottery. The serfs and wage labourers lived in the Linge River villages and it is interesting that when the exploitation of the demesnes began to break down during the thirteenth century, some of the settlements also began to collapse with it, as seen at Kerk-Avezaath and Zoelen, for example.[779]

Secondly, the long dominance of large landownership in the western river area also contributed to the later emergence of the large farmhouses and the stagnation of the villages, because it provided a favourable context for the emergence of short-term leasing (the causal factor in economic polarisation). In many regions of Western Europe after the Black Death, the restricted supply of labour gave rural peasants and tenants an unprecedented freedom in movement and legal status, and

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[777] Original view in, for example, A. Verhulst & R. de Bock-Doehaerd, 'Het social-economische leven tot circa 1000', in D. Blok, W. Prevenier & D. Roorda (eds.), *Algemene geschiedenis der Nederlanden* (Haarlem, 1981), 183-215. Studies revising this position include A. Buitelaar, *De Stichtse ministerialiteit en de ontginningen in de Utrechtse Vechtstreek* (Hilversum, 1993); B. Braams, *Weyden en zeyden in het broek: middeleeuwse ontginning en exploitatie van de kommen in het Land van Heusden en Altena* (Wageningen, 1995); E. Palmboom, *Het kapittel van Sint Jan te Utrecht. Een onderzoek naar verwerving, beheer en administratie van het oudste goederenbezit (elfde-veertiende eeuw)* (Amsterdam, 1992); Dekker, *Het Kromme*.

[778] The diversity in 'types' of manor near the Rhine discussed in A. Verhulst, 'La diversité du régime domanial entre Loire et Rhin à l'époque carolingienne', in Janssen & Lohrmann (eds.), *Villa, Curtis, Gangia,* 133-48. *Curtes* and granges of '*type dispersé*' addressed in R. Fossier, 'Les granges de Clairvaux et la règle cistercienne', *Citeaux in de Nederlanden* (1955), 265.

[779] J. Oudhof, 'Sporen en structuren', in J. Oudhof, J. Dijkstra & A. Verhoeven (eds.), *'Huis Malburg' van spoor tot spoor. Een middeleeuwse nederzetting in Kerk-Avezaath* (Amersfoort, 2000), 329-52; A. Botman & M. Kenemans, 'Sporen en structuren', in A. Verhoeven & O. Brinkkemper (eds.), *Twaalf eeuwen bewoning langs de Linge bij De Stenen Kamer in Kerk-Avezaath* (Amersfoort, 2001), 59-130.

there was more land to go round.[780] In the Western Betuwe, however, rural peasants did not increase their proportion of land ownership at the expense of the former manorial lords, despite the likely demographic changes of the fourteenth century. The fact that the peasantry was not able to get its hands on a large share of the land in the late Middle Ages played an important role in the eventual economic polarisation of the area. If the peasants had secured a higher amount of the land in the river area, short-term leasehold would never have taken off in the way it did, and therefore, consolidation of lease land would never have happened, and economic polarisation would never have happened. Peasants were more likely to hold onto their pieces of land (even though they did buy and sell when necessary) and work them themselves. Furthermore, peasants with their restricted capital were much less likely to make investments in their farms, hindering the commercialisation of agriculture.[781] The long dominance of the large landowners however, was a much more likely context for the proliferation of the short-term leases, when the former manorial lords and ecclesiastical institutions decided they did not want to directly exploit their lands any more from around 1300.

C: Power uncontested

If the proliferation of the short-term lease (which in turn led to economic polarisation and settlement changes in the sixteenth century) was dependant on the stability of large landownership over many centuries, the question is then how did the large landowners (aristocrats, former manorial lords, and ecclesiastical institutions) achieve this? The answer is that these particular social groups were barely challenged for their position over the long-term. Into the late Middle Ages and early modern period, towns had minimal influence over the countryside in the western part of the Dutch river area, demonstrating how urbanisation and commercialisation in the pre-industrial period were never one and the same thing, and their link was not always clear-cut.[782] Despite replacing Dorestad as a developing urban centre in the tenth century, Tiel had very little influence over the surrounding countryside in the late Middle Ages, partly due to the fact that its early merchant guild associations did not

[780] Dyer, *An age of transition?*; The ineffectiveness of lordship'; Bois, *Crise du féodalisme*; Hilton, 'A crisis of feudalism?'; Genicot, 'Crisis'.

[781] van Bavel, 'Land, lease and agriculture', 29-30.

[782] Indeed, commercialisation of pre-industrial Europe may have had its roots in agriculture rather than urbanisation, as suggested in Brenner, 'The agrarian roots of European capitalism'.

expand out of their eleventh-century roots[783] (the merchant guild of Tiel was mentioned by a cleric in 1020, one of the earliest references in Europe).[784] Furthermore, urban landownership in the Western Betuwe continued to play an insignificant role well into the sixteenth century and beyond, in complete contrast to other areas such as Flanders and Holland.[785] Even where it was more significant, it was never typical land associated with absentee burghers but actually townspeople from places such as Culemborg farming their own plots just outside the town.[786] The eastern parts of the Dutch river area such as the Neder-Betuwe and the Over-Betuwe, which were closer to the towns of Nijmegen and Arnhem, had slightly higher levels of burgher landownership, but still the majority of absentee landownership was ecclesiastical and made-up of monasteries, vicarages, and hospitals.[787]

The territorial lords such as the Bishop of Utrecht, the Count of Holland, and the Duke of Gelre, equally exerted minimal influence in the Western Betuwe. Admittedly, the Duke of Gelre did hold the feudal overlordship over half the feudal property in the Western Betuwe, and owned eight percent of the total land within the Tielerwaard.[788] However, most of this land was granted in fiefdom to various men of

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[783] For the end of Dorestad, see W. van Es, 'Dorestad centred', in Besteman et al. (eds.), *Medieval archaeology*; R. Hodges, 'Dark Ages economics revisited. W.A. van Es and the end of the mercantile model in early medieval Europe', in H. Sarfatij, W. Verwers & P. Woltering (eds.), *In discussion with the past. Archaeological studies presented to W.A. van Es* (Zwolle, 1999), 227-32.; S. Coupland, 'Trading places: Quentovic and Dorestad reassessed', *Early Medieval Europe*, 11.3 (2002), 209-32. For the rise and decline of Tiel, see H. Sarfatij, 'Tiel in succession to Dorestad', in Sarfatij et al. (eds.), *In discussion with the past*, 267-78; J. Oudhof, 'De handelsfunctie van Tiel in de periode late negende eeuw tot en met het begin van de elfde eeuw. Een historisch-archeologische verkenning aan de hand van vier stadskernopgravingen in de binnenstad van Tiel' (unpublished PhD, University of Amsterdam, 1996). For the early guilds of Tiel see J. Akkerman, 'Het koopmansgilde omstreeks het jaar 1000', *Tijdschrift voor Rechtsgeschiedenis*, 30 (1962), 414-7; de Munck et al., 'The establishement and distribution of craft guilds', in M. Prak et al. (eds.), *Craft*, 34-5.

[784] A. Mettensis, *De diversitate temporum et Fragmentum de Deoderico primo episcopo Mettensi*, H. van Rij (Amsterdam, 1980), 81.

[785] See the urban landownership in fourteenth-century Flanders in Nicholas, *Town and countryside*, ?. See the urban landownership in sixteenth-century Holland in de Vries, *The Dutch rural economy*, 43-7. However, urban institutions (especially from Zaltbommel) did gain more land in the Betuwe in the late sixteenth and seventeenth centuries. See GELA, Staten van het Kwartier van Nijmegen en hun Gedeputeerden, 0003, nos 368-72; GELA, Huis Enspijk, 0390, no. 39. Also, P. Leupen, 'Zaltbommel en zijn waarden: een verkenning van de relatie tussen een kleine stad en het platteland in het begin der zestiende eeuw', *Bijdragen en Mededelingen Vereniging Gelre*, 69 (1976/7), 80-101.

[786] van Bavel, *Transitie*, 509-11.

[787] R. van Schaïk, 'Nijmegen, Arnhem en de Betuwe. De relatie stad-platteland rond 1500', *Numaga*, 26.36 (1979), 104.

[788] van Bavel, *Transitie*, 218-9.

high social status (which became ever frequent in the late Middle Ages when the Duke was met by financial problems, as evidenced by increased tax pressure on subjects of the Duchy).[789] The Huis te Rumpt, Crayestein te Tricht and the Huis te Meteren are three examples of high-status properties bestowed to noble men as part of a fiefdom and traceable in the Gelre and Buren feudal books.[790] Thus, the feudal land belonging to the Duke of Gelre did not give him great influence over the western part of the Dutch river area, and in fact, by creating fiefs with the land, he achieved the opposite. Rather than creating a group of loyal subjects in the countryside, the granting of land away to local nobles and aristocrats only served to strengthen the signorial lords as a social group, vis-à-vis the territorial lords. Furthermore, some areas of the Western Betuwe such as the Land van Buren began to claim immunity from the payment of taxes to the Duke.[791] An example of the tension between the territorial lords and the local nobles is seen in a fraught episode in 1457 between the Duke of Gelre and Arnt Pieck (who had previously held the fortified 'Hoge Huis' of Beesd in fiefdom from the Duke).[792] The precise reason for the dispute is unclear but it seems to have been related to Arnt's recent installation as overseer of the Ambt Beesd and Rhenoy.[793]

The large aristocratic or ecclesiastical landowners, furthermore, did not encounter any pressure from below from the local peasants and farmers. Indeed, as already noted, local rural people had such a small proportion of landownership in the western part of the Dutch river area, that they had no foundations or tools to disturb the imbalance of power weighted in favour of the large institutions and nobles. Van Bavel has shown that rural revolts were not that common in the river area, perhaps in comparison to other parts of the Low Countries which had greater traditions of personal freedom and a conspicuous absence of manorialism.[794]

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[789] R. van Schaïk, 'Socio-economic inequality in town and countryside. The Duchy of Guelders in the fifteenth and sixteenth centuries', in J. Renaud (ed.), *Rotterdam Papers. A contribution to medieval archaeology,* iv (Rotterdam, 1982), 143.

[790] J. Belonje, 'Crayesteyn onder Tricht', *Bijdragen en Mededelignen Vereniging Gelre*, 47 (1944), 41-72; W. Baelaerts van Blokland, 'Het in 1553 gebouwde huis te Rumpt', *Bijdragen en Mededelingen Vereniging Gelre*, 35 (1932), 105-16; E. Beresteyn, 'Het huis te Meteren en zij bezitters (1267-1907)', *Bijdragen en Mededelingen Vereniging Gelre*, 11 (1908), 335-72.

[791] van Schaïk, 'Taxation, public finances', 268.

[792] H. Schouten, 'Het Hoge Huis te Beesd en zijn bewoners', *Mededelingen van de Historische Kring West-Betuwe*, 28.3 (2000), 21.

[793] GELA, Hertogelijk Archief, no. 860; GELA, Graven en hertogen van Gelre, graven van Zutphen, 0001, no. 645.

[794] van Bavel, 'Rural revolts and structural change'.

Thus, it is possible to draw links between a number of dynamic processes and elements of institutional or organisational stability, in order to explain settlement development in the Western Betuwe in the late Middle Ages and early modern period. The disparity between a set of large grandiose farmhouses and stagnant or declining village communities was a physical manifestation of high economic polarisation in the region; polarisation caused by the proliferation of a certain type of short-term lease with very few restrictive rules that was manipulated to the advantage of a small group. The proliferation of the lease, however, was only possible on the back of a rapid decline in manorial restrictions yet at the same time a stability in a property structure of large landowners; a situation which was reinforced over many centuries by an uncontested distribution of power.

D: 'A man's home is his castle': visible expressions of social hierarchy

A final element of continuity exhibited in the Western Betuwe is slightly different to the other three factors in that it was cultural. Indeed, settlement is practical in the sense that it provides human beings with warmth and protection; however, it can also be used to assert social status, particularly within rural communities which exhibited high levels of economic stratification. It is suggested in this section that the pre-existing ideologies connected with social hierarchy (which had existed for centuries) also informed the settlement divergence later seen in the sixteenth century. The arguments put forward here is that (a) large tenant farmers moved their grandiose farmhouses to isolated spots in order to emphasize their difference to the 'ordinary' villagers, and (b) a new social stratification opened up within the ranks of the farmers with some at the very least aspiring towards 'noble' or 'gentile' status.[795]

The western part of the Dutch river area provides a good example of an 'ideology of settlement' descending down the social hierarchy. There seems to have been a cultural connection between the Carolingian fortifications of the local elites,[796]

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[795] 'Aspiring' is the keyword because technically society was not socially mobile enough for a farmer ever to acquire noble status. See N. Plomp, 'Een boer is geen Edelman. Zestiende-eeuwse conflicten over riddermatigheid in de Neder-Betuwe', *Jaarboek van het Central Bureau voor Genealogie*, 47 (1993), 87-132.

[796] The kinds of structures discussed in H. Heidinga, 'From Kootwijk to Rhenen: in search of the elite in the Central Netherlands in the early Middle Ages', in Besteman et al. (eds.), *Medieval archaeology*; W. van Es, 'Friezen, Franken en Vikingen', in van Es & Hessing (eds.), *Romeinen, Friezen*, 231-3; H. Janssen, 'Tussen woning en versterking. Het kasteel in de middeleeuwen', in H. Janssen, J. Kylstra-Wielinga & B. Olde Meierink (eds.), *1000 jaar kastelen in Nederland: functie en vorm door de eeuwen heen* (Utrecht, 1996), 32-45.

the fortified residences and castles of the aristocratic families and territorial lords of the high Middle Ages,[797] the moated sites of the lesser nobility, and finally the tenant farmhouse complexes of the late Middle Ages. Tenant farmers, in the design of their farmhouses, wanted to ape the styles of their social superiors; a social hierarchy already crystallised in place many centuries previous, in the Middle Ages.

Although a synthesis of elite buildings in the river area has yet to appear, there are plenty of informative studies on small areas or individual excavations of moated sites and fortified houses.[798] The lower nobility of the late-medieval period, in particular, frequently built motte-castles in the Western Betuwe in order to show-off their power and pretensions.[799] Many of these sites were moated, for example, in the village of Deil a total of seven can be traceable through archaeological evidence.[800] It is likely that the high number of moats in this village was linked to the large quantity of knights residing there in the late Middle Ages.[801] Moats have certainly been linked more to the nobility in the Low Countries,[802] rather than successful peasant freemen as noted in England.[803] Further, very important fortified houses and castles were

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[797] The kinds of structures discussed in H. Janssen, 'The castles of the Bishop of Utrecht and their function in the political and administrative development of the bishopric', *Chateau Gaillard. Etudes de Castellologie Médiévale* 7 (1977), 135-57; 'The archaeology of the medieval castle in the Netherlands. Results and prospects for future research', in Besteman et al. (eds.), *Medieval archaeology*, 219-64.

[798] For example, J. van Doesburg & P. Schut, *Die hofstat tot Zoelen, daer dat hues op plach te staen – Een waardend booronderzoek op de motte Aldenhaag (gemeente Buren, Gelderland)* (Amersfoort, 2007); Botman & Kenemans, 'Sporen en structuren', 59-130.

[799] Janssen, 'The archaeology of the medieval castle', 232; 'Tussen woning'. Full list of castles and fortified residences in the Betuwe listed in E. Zandstra, *Kastelen en huizen in de Betuwe* (The Hague, 1962).

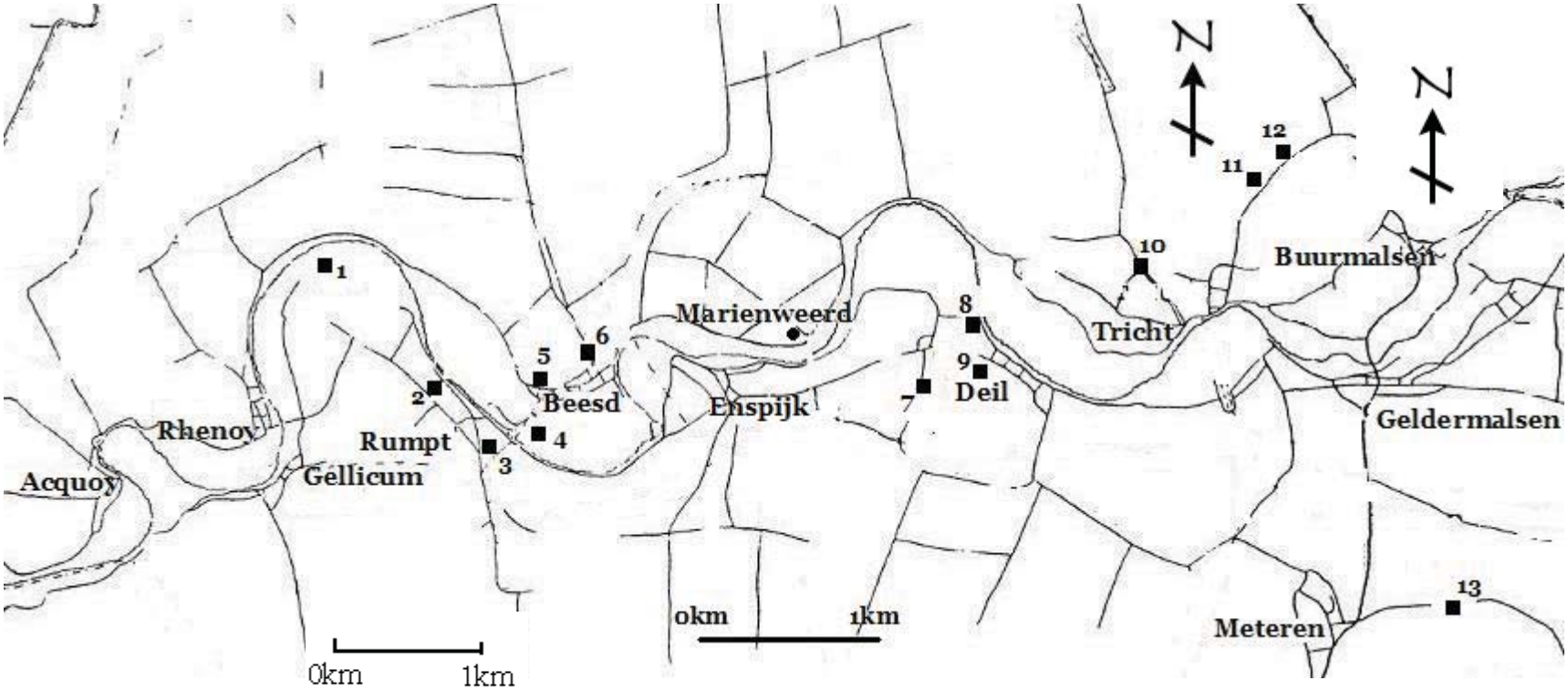
[800] J. Schuyf, 'Beyond the castle: moated sites in the Netherlands', in T. Hoekstra, H. Janssen & I. Moerman (eds.) *Liber castellorum: 40 variaties op het thema kasteel* (Zutphen, 1981), 144-53; A. van der Aa, *Aardrijkskundig woordenboek der Nederlanden,* iii (Gorinchem, 1851), 204.

[801] GELA, Archief van de familie Van der Capellen, 0467, no. 278.

[802] On moats and the nobility, see C. Hoek, 'Moated sites in the County of Holland', *Moated Sites Research Group Report*, 2 (1975), 18-20; F. Verhaeghe, 'Moated sites in Flanders: features and significance', in Hoekstra et al. (eds.) *Liber castellorum*, 98-121; F. Aberg (ed.), *Medieval moated sites in north-west Europe* (Oxford, 1981), ?; E. Bult, 'Moated sites in their economical and social context in Delfland', *Chateau Gaillard. Etudes de Castellogie Médiévale* (1987), 127-42; J. van Doesburg, 'Medieval castles in the Dutch central river area: towers of power?', *Concilium Medii Aevi*, 14 (2011), 76. A list of moats for the Betuwe is found in M. de Koning, 'Moated sites in Nederland. Archeologisch onderzoek naar de niet-primair verdedigbare middeleeuwse woningen' (unpublished PhD, Leiden University, 1995).

[803] Roberts, 'The historical geography of moated homesteads'; J. Le Patourel & B. Roberts, 'The significance of moated sites', 46-7, 51; Emery, 'Moated settlements in England', 384.

Figure 5.7 Castles, fortified residences and higher status buildings in the western river area from the late Middle Ages onwards[804]



[804] Numbers as follows. 1. Huis te Rumpt, 2. Leegpoel, 3. Boutenstein, 4. Blauwe Huis, 5. Hoge Huis, 6. Huis te Wolfswaard, 7. Bulkestein, 8. Palmestein, 9. Reinestein, 10. Crayenstein, 11. Arkel, 12. Reygersfoort, 13. Huize Meteren en Blanckenstijn.

often situated on top of a *terp*, for example, Reygersvoort near Buurmalsen and Royestein between Geldermalsen and Wadenooijen. Perhaps this was to protect the houses from flooding, but the raised mounds may also have had significance for social status.

The point being made here is that the sixteenth-century farmhouses belonging to the large tenant farmers of the western Dutch river area had many stylistic similarities to the elite housing of the medieval period. Many were positioned on the top of *terpen*, a process which only began from the fourteenth century onwards, after the dikes had been laid down. Some were moated and some even had laid out ornate gardens in front of the house. The farmhouses were, by the sixteenth century, increasingly made out of brick, probably imported from nearby Holland where brick-manufacturing had really taken off as a proto-industry, and additionally, the windows were made out of large panes of glass.[805] In sum, while not being the sole factor, the divide between the large farmhouses and the stagnant villages was to some extent reinforced by the cultural needs of the tenant farmers to establish a sense of exclusivity from the local community, which was informed by a pre-existing social hierarchy.

5.6 Conclusion and aftermath

Before the fourteenth century, the precarious environmental conditions in the western parts of the Dutch river area prohibited permanent settlement away from the main villages lining the Linge River. Once a coherent system of dikes was in place, settlement in the lower-lying basins of the Western Betuwe was far more feasible. Nonetheless, large farmhouses did not (generally) appear away from the villages until the sixteenth century, the reason being that it took a long-time for the tenant farmers to rearrange their lease land into large consolidated units. Farmers had to be patient in this regard, and consolidation of land into farm units was only completed over a number of generations. The proliferation of the lease made this all possible, but only on the back of the unproblematic disintegration of the manorial system, and the strong continuity in large landownership, unchallenged property structures, and social hierarchies (culturally replicated).

The rise of a small group of successful farmers, however, was to the detriment of the village communities; the settlements which housed the 'losers' of the fifteenth and sixteenth centuries. Capital intensive, labour extensive, pastoral-orientated

[805] On the use of brick extended down the social hierarchy, see J. Voskuil, *Van vlechtwerk tot baksteen: geschiedenis van de wanden van het boerenhuis in Nederland* (Arnhem, 1979), 21-38.

agriculture, as well as land loss, the decline of the commons, and a lack of proto-industry or alternative means to make a living, led to widespread unemployment, and the eventual stagnation of villages which decreased in size and were caught in a cycle of deprivation. The general population were undoubtedly a lot worse off than the rural folk living in less commercialised regions such as Drenthe.[806] Misery was only exacerbated in the sixteenth century, connected to the turbulences caused by the Dutch Wars of Independence, and many villages and institutions were repeatedly ransacked and plundered.[807]

The villages may have continued on their downward spiral had outward migration not ceased by the end of the seventeenth century. Economic polarisation continued unabated into the early twentieth century,[808] the only difference was that by roughly 1700, local people could now turn their hands to newly introduced crops such as potatoes,[809] fruit,[810] and tobacco;[811] often in sharecropping contracts offered by former large tenant farmers who by the eighteenth century had bought their farms outright.[812]

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[806] See van J.L. van Zanden & L. Noordegraaf, 'Early modern economic growth and the standard of living: did labour benefit from Holland's Golden Age?', in K. Davids & J. Lucassen (eds.), *A miracle mirrored. The Dutch Republic in European perspective* (Cambridge, 1995), 410-37.

[807] For example, Buren, Buurmalsen and Tricht were badly afflicted. See A. Dekker, 'Buurmalsen, een merkwaardig dorp', *Mededelingen van de Historisch Kring West-Betuwe*, 9 (1976), 4-9.

[808] J. Bieleman, 'De Gelderse landbouw voor 1850', in *Anderhalve eeuw Gelderse landbouw. De geschidenis van de Geldersche maatschappij van landbouw en het Gelderse platteland* (Groningen, 1995), 57. See, for example, polarised distributions of houses, land and animals in R. van Maanen, 'Landbouwbedrijven in Deil, Geldermalsen, Varik en Waardenburg en hun eigenaars in 1825', *Genealogisch Tijdschrift* (1999), 26-32.

[809] GELA, Rechterlijk Archief Over-Betuwe, no. 481. Also Bieleman, 'De Gelderse landbouw', 38-9, 48-50, 59-60; H. Roessingh, 'Het begin van de aardappelteelt en de aardappelconsumptie in Gelderland', *Gelders Oudheidkundig Contactbericht*, 68 (1976), 1-9; M. Bergman, 'The potato blight in the Netherlands and its social consequences', *International Review of Social History*, 12 (1967), 400.

[810] W. Sangers, *De ontwikkeling van de Nederlandse tuinbouw (tot het jaar 1930)* (Zwolle, 1952), 111; J. Doorenbos, *Opheusden als boomteelcentrum* (Assen, 1950), 39-54; G. Wttewaal, 'Landbouwkundige beschijving van een gedeelte der provincie Utrecht, tusschen de steden Utrecht en Wijk bij Duurstede', *Tijdschrift ter Bevordering van Nijverheid*, 2 (1834), 35. For example, a high number of inhabitants of the parishes Buurmalsen and Tricht had access to orchards in SWB, Archief van de Dorpen Buurmalsen en Tricht (1581) 1594-1811 (1826), no. 225.

[811] H. Roessingh, *Inlandse tabak. Expansie en contractie van een handelsgewas in de 17e en 18e eeuw in Nederland* (Wageningen, 1976).

[812] Brusse, *Overleven door ondernemen*.

Chapter 6
Settlement development in the Oldambt region of Groningen, 1500-1900. From a farmers' republic to a polarised polder society?

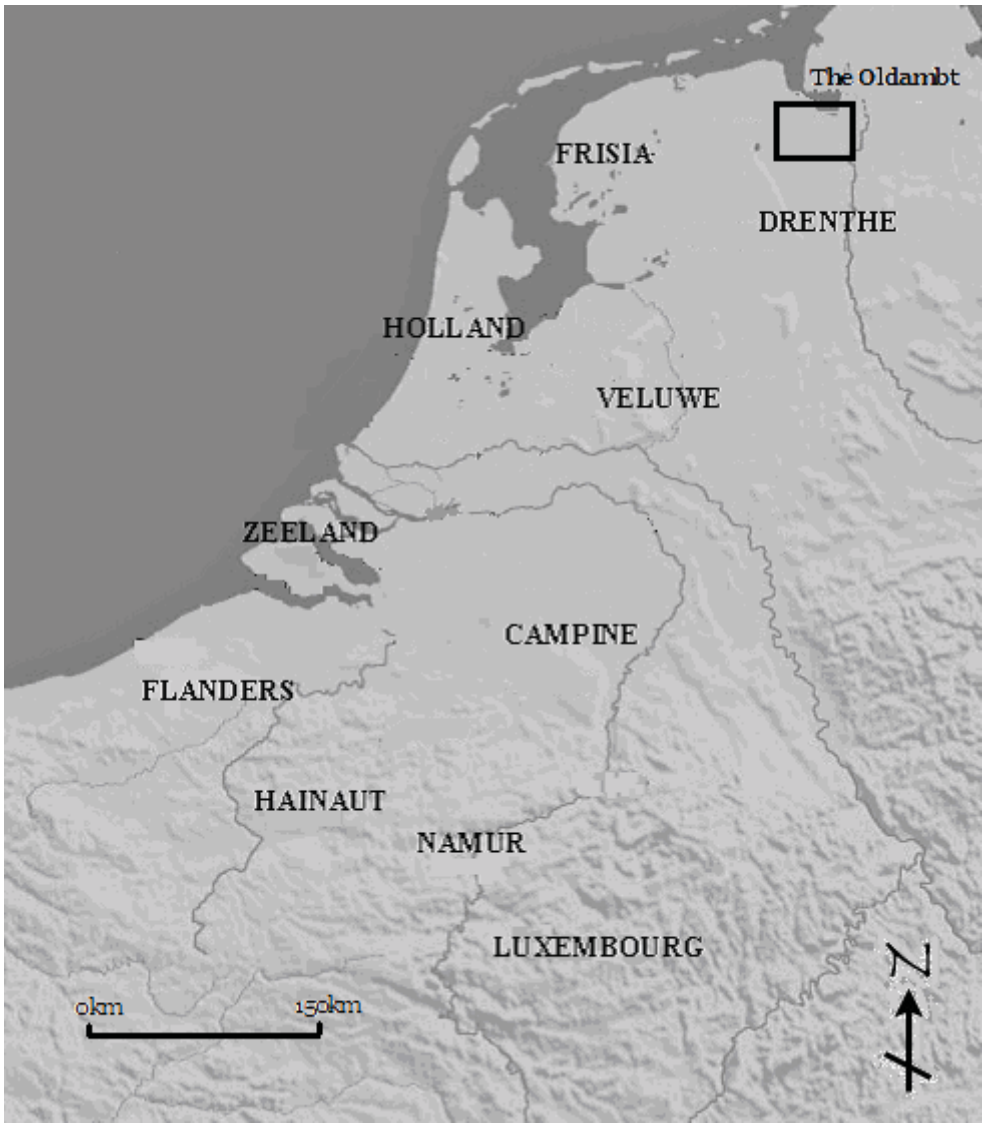
Agricultural labourers on strike, The Oldambt, 1929.[813]

[813] Picture taken from Otto Knottnerus's personal website. http://ottoknot.home.xs4all.nl/werk/

6.1 Economic polarisation and settlement development

In the Oldambt region of Groningen in the far north-east of the Netherlands (located next to the border of modern day Germany), two important developments occurred between the mid-eighteenth century and the end of the nineteenth century.

Figure 6.1 Location of the Oldambt in the Low Countries, c. 1600-1800



First, it experienced roughly during this period a high level of settlement and demographic expansion. Population levels soared here. Second, during the nineteenth century there was a strong tendency towards economic polarisation. A great economic (and some may argue social and cultural) chasm had grown between a minority of rich local farmers with large ornate farmhouses and a massed labouring poor with little land. The overlap of these two processes is curious. Indeed, it is

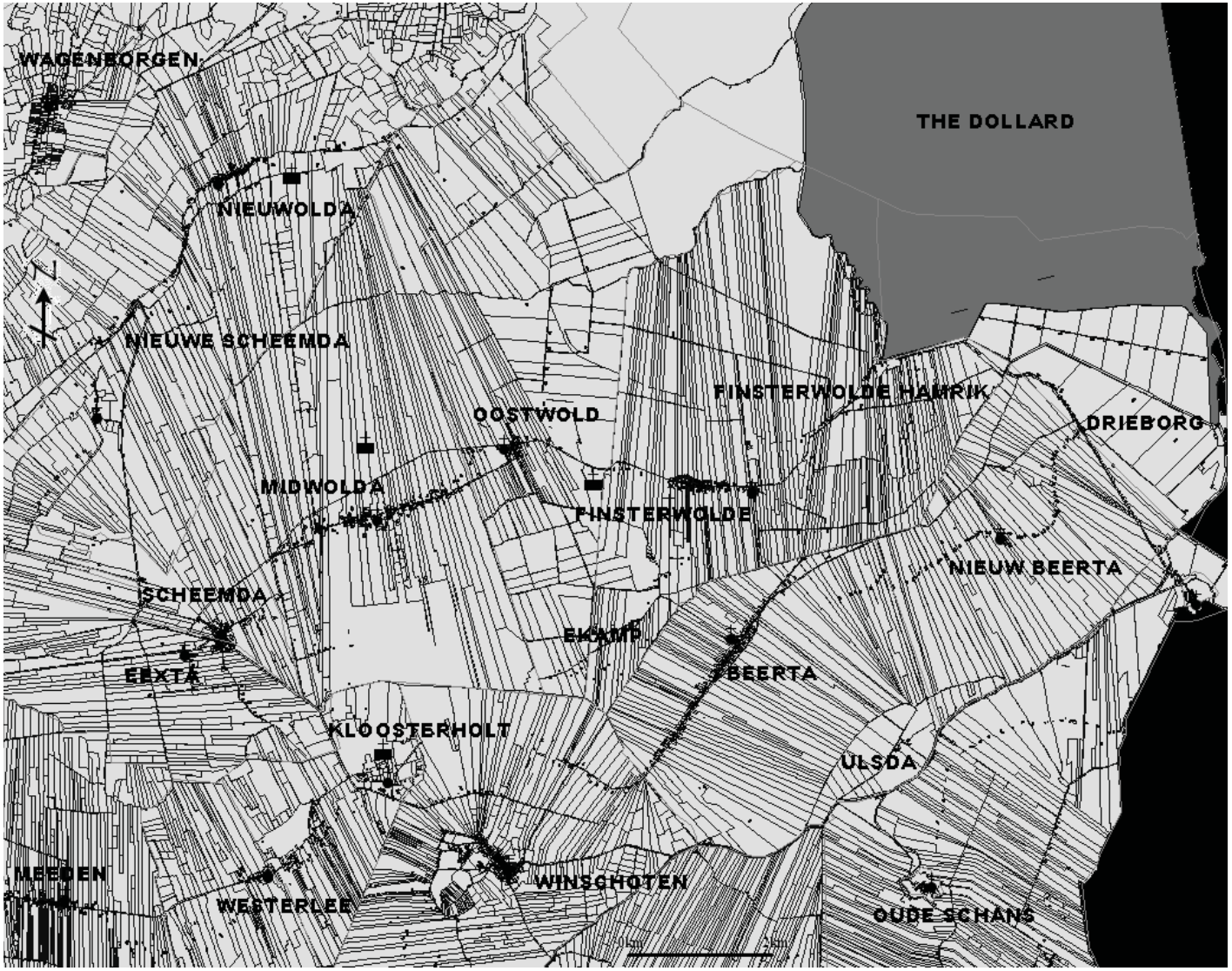


Figure 6.2 Study area of the Oldambt, (as it looked in 1832)

outward migration and population decline which has often been associated with polarised rural societies, involving settlement collapse, high unemployment, impoverishment, and a general trend of migration towards the city in search of work.[814]

In this chapter, this sort of interpretation is turned on its head slightly. First, it is argued that the demographic and settlement expansion experienced in the Oldambt, began before economic polarisation. In fact, a chasm between farmers and labourers was only forged in the nineteenth century, and furthermore, was much more pronounced in 1900 than in 1800. Thus, in the explanatory framework of this chapter, it is suggested that demographic and settlement expansion actually had a role in perpetuating economic polarisation within the Oldambt, although significantly **only in combination** with certain distinct features of property structure, identified as (i) the prominence of long-term leasehold known as *beklemrecht*, (ii) the increasing levels of urban absentee landownership during the eighteenth century, and (iii) highly restrictive inheritance practices.

If demographic and settlement expansion had a more causal role to play in the economic polarisation in the Oldambt, how then do we begin to explain the consistently rising population figures from the mid-eighteenth to the late nineteenth centuries? In this paper, there are two different explanations, one emphasizing dynamic change in the Oldambt and the other emphasizing inherent flexibility in the local economy. First, despite the trend towards polarised access to land by the nineteenth century, it is argued that settlements expanded and population grew from 1730 to 1850 as even agricultural labourers collectively shared in the successes of the large, commercially-orientated farmers who had emerged in the region. Second, although living standards for the bulk of the population suffered a decline in the period 1850-1900, the upward demographic trends continued in this second period due to the emergence of what can be described a 'flexible-survival' economy. The very notion of landlessness is a misnomer in the Oldambt, since inhabitants were able to

[814] A central tenet of a thesis by Charles Tilly was that in pre-industrial society landless labourers were migratory while peasant land-owning societies were 'relatively immobile'. See C. Tilly, 'Migration in modern European history', in W. McNeill & R. Adams (eds.), *Human migration, patterns, and policies* (Bloomington, 1978), 53. Also noted in M. Flinn, *The European demographic system, 1500-1820* (Baltimore, 1981), 23; D. Grigg, *The dynamics of agricultural change: the historical experience* (London, 1982), 110-3. Some have emphasized the temporary migration of impoverished rural dwellers in search of work. See Blum, *The end of the social order in rural Europe*, 111. On the exodus of rural peoples towards the cities, see Hochstadt, *Mobility and modernity*; Jackson, *Migration and urbanisation in the Ruhr Valley*; Oris, 'Cultures de l'espace et cultures économiques'; Rosental, *Les sentiers invisibles*.

combine intensive work on their own small plots with a number of other diverse economic activities. It was the opportunity for poor people to scrape together a living that kept people in the Oldambt and stopped outward migration. Only in the mid-stages of the twentieth century did these upward demographic trends cease and settlements begin to stagnate, partly down to new technological innovations such as chemical fertilisers and modern farm machinery.

The chapter is organised as follows. In the second section, some background to the development of settlement in the Oldambt before the sixteenth century is provided, in particular describing some of the environmental difficulties associated with early habitation in the region. The third section shows that the initial reclamations into the polders were undertaken by a group of small free farmers supported by favourable jurisdictions over the waste, and furthermore, the Oldambt remained quite an egalitarian society up until roughly the mid point of the eighteenth century (and perhaps later). In the fourth section, it is revealed that economic polarisation in the Oldambt only really took-off in the nineteenth century (though may have begun in the second half of the eighteenth century). In the fifth section, demographic and settlement expansion from (roughly) the mid-eighteenth century onwards is given a more causal role in stimulating economic polarisation, (**yet only**) coupled with three peculiar aspects of property structure, these being (i) the emergence of *beklemrecht*, (ii) the increasing urban landownership and investment in the region, and (iii) peculiar inheritance and marriage practices. In the sixth section, a question is considered – if demographic and settlement expansion had such a causal role to play in turning the Oldambt from a 'farmers' republic' into a polarised polder society, what caused the prolonged upturn in population trends? It is concluded that it was facilitated by (a) a shared success in the dynamic changes in commercialised agricultural production and later (b) an inherently flexible economy, allowing local inhabitants the opportunity to eek out a hard and precarious living.

6.2 A precarious existence: medieval settlement and the flooding of the Dollard

The Oldambt region today is bordered to the north by the Dollard Sea. In the Middle Ages however, the Dollard Sea was much smaller, and the land mass (which came to be known as the Oldambt by the fourteenth century) was much larger. From the earliest dates of permanent settlement, inhabitants of this region knew a precarious

existence.[815] Small villages and farms were initially placed on raised mounds known as *terpen* (or *wierden* in Groningen), as protection against the sea.[816] A number of former raised farmsteads are still traceable in the landscape between Woldendorp and Nieuwolda, on the edge of the Dollard.[817] During the high and late Middle Ages, the need for more sophisticated forms of water management grew. Dikes were constructed and maintained through water management boards known as '*zijlvesten*', formalised in the thirteenth century, and later organised parish-by-parish.[818] Help with drainage was provided by small windmills.[819]

Some minor diking projects were also funded by ecclesiastical institutions such as the network of Norbertine and Cistercian monasteries, which owned around 15 percent of land in the whole Province during the Middle Ages.[820] There were a number of monasteries of various orders which were founded in the thirteenth and early fourteenth centuries in the Oldambt: Cistercian monasteries at Midwolda in 1259 and Menterwolde at Nieuwolda in 1247, the Johanitter institution of Goldhoorn at Finsterwolde in 1319, and two Premonstratensian monasteries at Palmar out in the Dollard marshes and Heigerlee[821] near Winschoten.[822] These probably all contributed to water management, particularly in administering their granges and large farms known as '*voorwerken*', which were generally situated on the oldest cultivated lands

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[815] On the earliest settlement phase, see W. Haarnagel, 'De prähistorischen Siedlungsformen in Küstengebiet der Nordsee', in *Beiträge zur Genese der Siedlungs- und Agrarlandschaft in Europa* (Wiesbaden, 1968), 68, 71. On the problems caused by the encroachment of the sea on these early habitations, see W. TeBrake, 'Ecology and economy in early medieval Frisia', *Viator*, 9 (1978), 1-30.

[816] On these settlements in the province of Groningen, see M. Bierma, A. Clason,. E. Kramer & G. de Langen (eds.), *Terpen en wierden in het Fries-Groningse kustgebied* (Groningen, 1988).

[817] For archaeological evidence of former terpen on the edge of the Oldambt, see monument numbers 6804, 7211, 6815, 7210 in 'Rijksdienst voor het cultureel erfgoed KICH: rijksmonumenten dataset', <http://www.kich.nl/kich2005/rapport.jsp?bron=32&idbron=7210>; S. Tuinstra, K. Bosma & A. Ufkes, *Middeleeuwse bewoningssporen op de wierde van Woldendorp. Een archeologische opgraving aan de BurgemeesterGarreltsweg te Woldendorp, gemeente Delfzijl (Gr.)* (Groningen, 2006).

[818] On dike-building, see G. Engelen, 'Oude dijken in de westelijke Dollardboezem', *Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap*, 82 (1965), 72-82; H. Groenendijk, 'Middeleeuwse bedijking aan de rand van de Dollard bij Zuidbroek', *Paleo-aktueel*, 2 (1991), 47-51. On the *zijlvesten*, see W. Ligtendag, *De Wolden en het water. De landschaps- en waterstaatsontwikkeling in het lage land ten oosten van de stad Groningen vanaf de volle middeleeuwen tot ca. 1870* (Groningen, 1995).

[819] G. Kortekaas, 'Archaeologie in 2007 en 2008', *Hervonden Stad*, 13 (2008), 6-59.

[820] de Vries, *The Dutch rural economy*, 41-2.

[821] On Heigerlee, see N. Backmund, 'Verkoop en afbraak van Heigerlee en Nyeklooster-op-den-Dam in 1597', *Sacris Erudiri. Jaarboek voor Godsdienstwetenschappen*, 7 (1955), 381-5.

[822] All described in C. Tromp, *Groninger kloosters* (Assen, 1989), 74-5, 34-8, 57-9.

and worked by lay brothers of the monasteries.[823] These early drainage efforts allowed for the establishment of precariously-sited settlements around the Dollard.[824]

In spite of dike-building, the problems with water management in the Oldambt became more serious in the late Middle Ages. First, the soil surface was reduced from 2 metres to 0.3 metres above sea level, and present day practices with the *Nieuwe Statenzijl* indicate that all land below 0.4 metres was flooded for long periods during winter. Second, attempted land reclamation and water management only exacerbated the problems, as excess water ran down from the peat highlands. Reclamation of the peat bogs and swamps caused erosion of the surface soil, leading to oxidisation and general soil subsidence.[825] Thus by the fifteenth century, all the tiny villages and farms close to the coast were at a perilous threat of being submerged by the sea.

Although the Dollard eventually flooded in 1508, most of the settlements on the land mass closer to the coast had already been abandoned in anticipation of this event.[826] The large number of former medieval settlements around the Dollard is indicated on the map below; all the places east of the curved thick line were washed away when the Dollard broke through a key dike which had been constructed in 1454.[827] The old village of Scheemda was deserted before the floods of 1508, its former position shown by the remains of an isolated church known as 'Ol Kerkhof' with a grave containing 50 skeletons.[828] Villages such as Midwolda and Meeden also were moved from their older sites.[829]

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[823] J. Mol, 'Aduard 1192-1594. Een korte geschiedenis van het klooster', in *Een klooster, drie dorpen. Geschiedenis van Aduard, Den Ham en Den Horn* (Bedum, 1992), 19-36; P. Noomen, 'Middeleeuwse ontwikkelingen in Rolderdingspel', in J. Borgesius (ed.), *Geschiedenis van Rolde* (Amsterdam, 1993), 83-114; 'Middeleeuwse bezitsverhoudingen in Noordoost Fivelingo', in E. de Boer, L. Bos & O. Mulder-Steenbrink (eds.), *Het Bierumer Boerderijenboek. Een bijdrage tot de geschiedenis van noordoost-Fivelingo* (Scheemda, 1996), 70-72.

[824] H. Groenendijk & W. Schwarz, 'Mittelalterliche Besiedlung der Moore im Einflußbereich des Dollarts', *Archäologische Mitteilungen aus Nordwestdeutschland*, 14 (1991), 39-68.

[825] A common feature of medieval reclamation in the Low Countries. See G. Borger, 'Draining-digging-dredging. The creation of a new landscape in the peat area of the Low Countries', in J. Verhoeven (ed.), *Fens and bogs in the Netherlands. Vegetation, history, nutrient dynamics and conservation* (Dordrecht, 1992), 131-71.

[826] For an excellent list of the drowned settlements and their earliest mention in the documents see O. Knottnerus, 'Verdronken dorpen in het Oldambt', http://www.xs4all.nl/~ottoknot/werk/; 'Verdwenen dorpen', *Groninger Kerken*, 28.1 (2011), 3-8.

[827] For the agreement between the Oldambt and the city of Groningen on the building of this dike, see RAG, Losse stukken register Feith, meest charters, 1246-1864, 2241, no. 48.

[828] W. Casparie & J. Molema, 'Het middeleeuwse veenontginningslandschap bij Scheemda', *Palaeohistoria*, 22 (1990), 271-89; H. Uytterschaut, 'The human skeletons from the late-medieval

Figure 6.3 The Oldambt, c.1200-c.1500, before the flooding of the Dollard[830]

Taken from: O. Knottnerus, 'Het Dollardgebied: een inleiding', <http://www.xs4all.nl/~ottoknot/dollard/index.html>.

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graveyard of Scheemda', *Palaeohistoria*, 32 (1990), 323-30; 'De menselijke skeletten uit Scheemda (Gr.)', *Paleo-Akuteel*, 2 (1991), 127-9; H. Groenendijk & J. Molema, 'Het 'Ol Kerkhof' van Scheemda: een kerk onder klei', *Noorderbreedte. Tijdschrift over Natuur, Milieu en Landschap van Friesland, Groningen en Drenthe*, 13 (1989), 9; J. Molema, 'Het 'Ol Kerkhof' te Scheemda (Gr.); tussentijds verslag van een opgraving', *Paleo-Aktueel*, 1 (1989), 107-11; 'De opgravingen op het kerkhof van het verdronken dorp Scheemda', *Paleohistoria*, 32 (1990), 247-70; W. Prummel, 'Draught horses and other animals at late-medieval Scheemda', *Paleohistoria*, 32 (1990), 299-314; 'Resten van dieren van het 'Ol Kerkhof' te Scheemda', *Paleo-Aktueel*, 3 (1992), 109-11.

[829] See R. Bärenfänger & H. Groenendijk, 'Versunkene Siedlungen am Dollart', *Archäologie in Niedersachsen*, 2 (1999), 116-9; J. Molema, 'Kerken in de voormalige Dollardboezem (Gr.)', *Paleo-Aktueel*, 2 (1991), 123-6; 'Een steenhuis te Midwolde (Oldambt, Gr.)', *Paleo-Aktueel*, 6 (1995), 129-32; 'Meeden in de middeleeuwen', in *Boerderijen 'Wold-Oldambt'*, ii (1997), 221-7.

[830] Map drawn by U. Emmius in 1630 using the researches of J. van der Meersch in 1574. Another excellent map of the drowned villages in the Dollard of the medieval period can be found in GA, 'Vertooning der carspelen die in den Dullart vergaet zijn', <http://kaarten.abc.ub.rug.nl/root/grp/krtms-1664-grp-kopie/>.

The remains of former monasteries provide further evidence for widespread abandonment.[831] Menterwolde (Campis Silvae) monastery was relocated from its position east of Nieuwolda to Termunten in 1399.[832] The displaced people moved away from the coast, settling in a new series of villages, up on the sandy ridges which nowadays separate the light clays of the polders from the peat soils of the Veenkolonien.[833] Thus, through this process, the village sites visible today were born. The linear structure of these settlements contrasts with the villages of Wagenborgen and Woldendorp to the west, which instead have a concentric settlement pattern.[834]

6.3 An egalitarian farming society from the sixteenth to eighteenth centuries

The sixteenth century represented the first stages of the human 'fightback' against the sea. The water which had swept over the former farmlands had turned these areas into swampy marshes. Displaced villagers, therefore, began to set about reclaiming these marshes – turning wastes into cultivable fields. Colonising farmers were armed with the '*recht van opstrek*'; an old jurisdiction possibly originating with the *Fries-Hollandse* colonisation of the marshes of the lower Netherlands.[835] As well as receiving the equivalent amount of land in their new locations in compensation for the lands lost in the floods, the displaced farmers also had ownership over all uncultivated salt marshes backing onto their property. This was accompanied by written evidence, and people were fined if claiming for more than they previously

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[831] B. Hazelhoff, 'Het vergeten klooster te Dallingeweer', *Bulletin van de Historische Kring 'De Marne'*, 6 (1979), 81-6; 'Borg en klooster te Dallingeweer', *Bulletin van de Historische Kring 'De Marne'*, 9 (1986), 65-79; H. Halbertsma, 'Sporen van verdronken dorpen en verlaten Cistercienser kloosters, Dollardgebieden (Groningen)', *Berichten van de Rijksdienst voor het Oudheidkundig Bodemonderzoek*, 3 (1952), 18-20.

[832] R. Georgius & L. de Smet (ed.), *Honderd jaar Landbouwvereniging 'Nieuwolda-Nieuw-Scheemda' (1860-1960)*, i (Nieuwolda, 1960), 34-7.

[833] As described in J. Meijering, 'Oldambt, streek van de verplaatste dorpen', *Noorderbreedte* (1987), 87-92.

[834] For these villages to the west see, for example, B. Hazelhoff, 'Wagenborgen aan en van de kust', *Bulletin De Marne*, 4 (1977), 33-50.

[835] For the *recht van opstrek* in Groningen and Friesland, see E. Hofstee, 'Bespreking van O. Postma, De Friesche Kleihoeve', *Tijdschrift voor Rechtsgeschiedenis*, 14 (1935), 201-18. Also see F. Ketelaar, *Oude zakelijke rechten vroeger, nu en in de toekomst* (Zwolle, 1978), 250-61; H. Keuning, *De Groninger Veenkolonien: een sociaal-geografische studie* (Amsterdam, 1933), 37-8.

had.[836] Any unclaimed land reverted to the city of Groningen.[837] Early allotment of the first polders was based on differing hereditary rights belonging to each colonist.[838] From each farmhouse (placed in a parallel row along a street), the *recht van opstrek* allowed the colonisers to go as far as they wanted into the marshes, until a natural barrier was met, or until it met up with another property.[839] Some of the narrow reclaimed strips extended for kilometres, a pattern still seen at Slochteren.[840]

The linear strip reclamation may have taken its cue from the monasteries, which were already colonising land in this way.[841] The Grijzevrouwen priory of Midwolda was positioned out on the 'Oud-Nieuwland' in front of the village (seen above), and had land pertaining to it which was consolidated in an elongated formation.[842] The same went for the Menterwolde abbey at Nieuwolda which had a strip of consolidated land that went straight through the older polders and joined up with the settlement at Midwolda.[843]

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[836] Thus it was a slightly different situation to that found in fourteenth century Friesland where the Count of Hainaut simply ordered that the drowned lands could go to anyone with the wherewithal to start building dikes. See A. Wauters (ed.), *Table chronologique des chartes et diplômes imprimés concernant l'histoire de la Belgique*, ix (Brussels, 1896), 26-7.

[837] G. Stratingh & G. Venema, *De Dollard of geschied-, aardrijs- en natuurkundige beschrijving van dezen boezem der Eems* (Groningen, 1855), 330-1.

[838] For parallels to this process of sixteenth century farmer-led colonisation in the coastal marshes, see K. Brandt, 'Die mittelalterliche Siedlungentwicklung in der Marsch von Butjadingen (Landkreis Wesermarsch). Ergebnisse archaologischer Untersuchungen', *Siedlungforschung*, 2 (1984), 123-46; J. Ey, 'Late medieval and early-modern reclamation of marsh lands: the role of the state and of village communities. A case-study of the north-western Weser-marshes under the Counts of Oldenburg', in H-J., Nitz (ed.), *The medieval and early-modern rural landscape of Europe under the impact of the commercial economy* (Göttingen, 1987), 214-5; E. Wassermann, 'Opstreknederzettingen in Oost-Friesland', *Historisch-Geografisch Tijdschrift*, 7 (1989), 18-27.

[839] For an example of a negotiation over boundaries after reclamation, see GA, Losse stukken register Feith, meest charters, 1246-1864, 2241, no. 433.

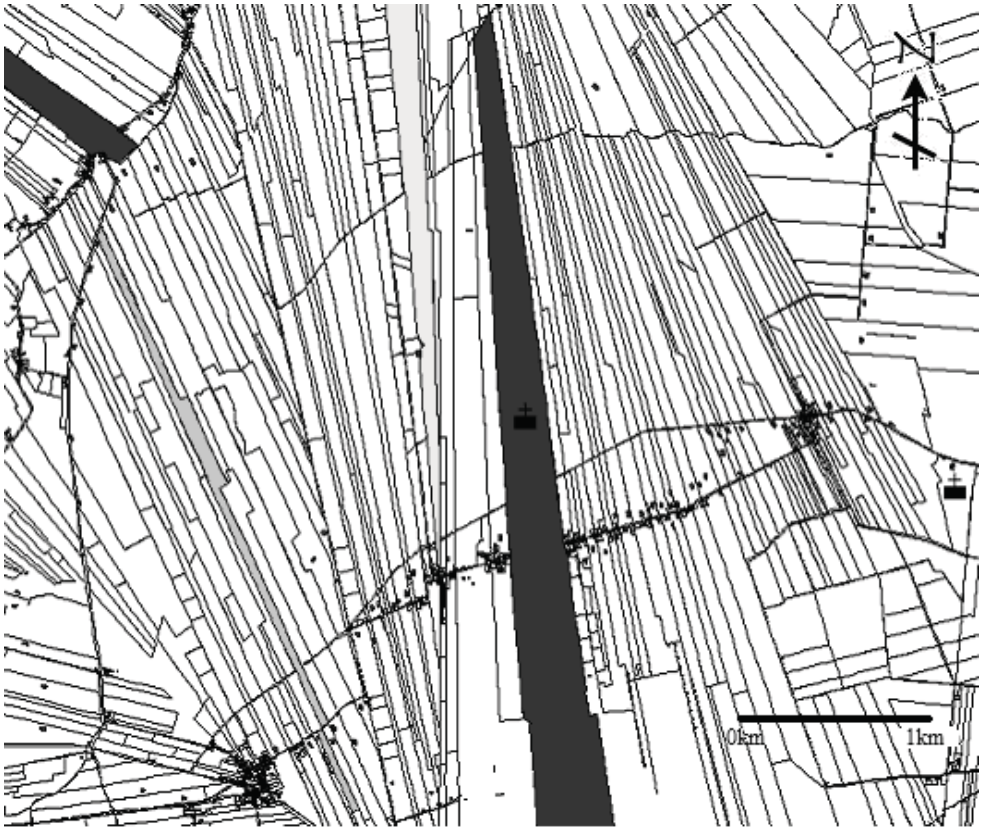
[840] J. de Cock, 'Ontginningsgeschiedenis van de gemeente Slochteren', *Groningse Volksalmanak*, 67 (1967), 162-85.

[841] C. Tromp, *Groninger kloosters* (Assen, 1989), 34-5, 37-8.

[842] *Idem*, 37-8

[843] *Idem*, 34-5.

Figure 6.4 Former monastery landownership and elongated reclamation pattern from Midwolda onto the Oud-Nieuwland (as it looked in 1832)[844]



Who were the colonists of the sixteenth and seventeenth centuries? Peter Hoppenbrouwers suggested that in three-quarters of the parishes in the Oldambt in 1660, over 50 percent of the land was used by farmers with less than 6 hectares.[845] Such figures are likely an over-exaggeration however, given the methodological problems surrounding his approach. Hoppenbrouwers explicitly acknowledges that many farmers used land in a number of different parishes; he suggests this problem can only be overcome by creating a regional database of land-users, and yet continues to pursue his investigation into farm sizes using the 1660 copy of the *verponding* (fiscal registration of land) on a strictly parish by parish basis.[846] Such an approach

[844] Black symbol represents position of Grijzevrouwen priory of Midwolda. The dark shaded area is Grijzevrouwen-owned land, while the light shaded area is land belonging to Menterwolde abbey at Nieuwolda. Map drawn with the HISGIS software developed by the Fryske Akademy. See J. Mol, *HISGIS Groningen. Opzet, verrijkingsmogelijkheden en prioriteiten: rapport* (Leeuwarden, 2010); E. Heere, *GIS voor historisch landschapsonderzoek. Opzet en gebruik van een historisch GIS voor prekadastrale kaarten* (Utrecht, 2008).

[845] P. Hoppenbrouwers, 'Grondgebruik en agrarische bedrijfsstructuur in het Oldambt na de vroegste inpolderingen (ca. 1630 – ca. 1720)', in Elerie & Hoppenbrouwers (eds.), *Het Oldambt*, 80.

[846] *Idem*, 76.

was always going to give a false impression of the number of smallholders. Actually only around 12 percent of the land in the Oldambt was used by farmers with less than 6 hectares. Nonetheless, despite reservations over Hoppenbrouwers' methodology, he was correct in his assertion that the seventeenth-century Oldambt was dominated by a property structure of small farmers and tenants. In 1630, 1660 and 1721, the Gini-index was 0.54, 0.56, and 0.54 respectively, reflecting a quite egalitarian distribution of land with a shallow hierarchy. The distribution of farm sizes is presented below.

The table and graph below show that between 1630 and 1721, polarisation of landed resources was not exaggerated. The number of very large farms did increase from two in 1660 to six in 1721, but they still only represented six percent of the total land. Furthermore, there was no proliferation of tiny holdings associated with agricultural labourers. In fact, the number of very small landholders (possibly impoverished) decreased between 1630 and 1721, and represented an even smaller proportion of the total land – less than one percent in 1721. There were some changes however. More farmers by 1721 had moved up into the threshold of medium-sized enterprises. The proportion of small farmers who held anything from three to 10 hectares had declined by 1721, and the highest proportion of land in the Oldambt now was worked on farms of 21 to 40 hectares (40 percent of the land), and this figure went up to around 60 percent if we extend the band from 11 to 40 hectares. Thus, larger farms were being formed from the late seventeenth century, though there were no signs of obvious polarisation yet or great divides between rich and poor.

Table 6.1 Farm sizes in the Oldambt, 1630-1721

	No. of landholders			Total landholders (%)			Total land (%)		
Farm sizes (h)	**1630**	**1660**	**1721**	**1630**	**1660**	**1721**	**1630**	**1660**	**1721**
1-2	178	169	126	20.6	21.8	18.5	2.2	2	0.9
3-6	274	214	149	31.6	27.7	21.9	13.2	9.8	5.6
7-10	152	135	90	17.6	17.4	13.2	15.2	12.8	7.1
11-20	169	128	128	19.5	16.5	18.8	28.7	22.5	19.7
21-40	57	96	144	6.6	12.4	21.1	18.1	30.9	40.8
41-80	34	30	39	3.9	3.9	5.7	20.3	19.2	19.9
80+	2	2	6	0.2	0.3	0.9	2.3	2.8	6
Total	**866**	**774**	**682**	**100**	**100**	**100.1**	**100**	**100**	**100**

GA, Archief Staten van Stad en Lande, nos 2133, 2139-41, 2143.

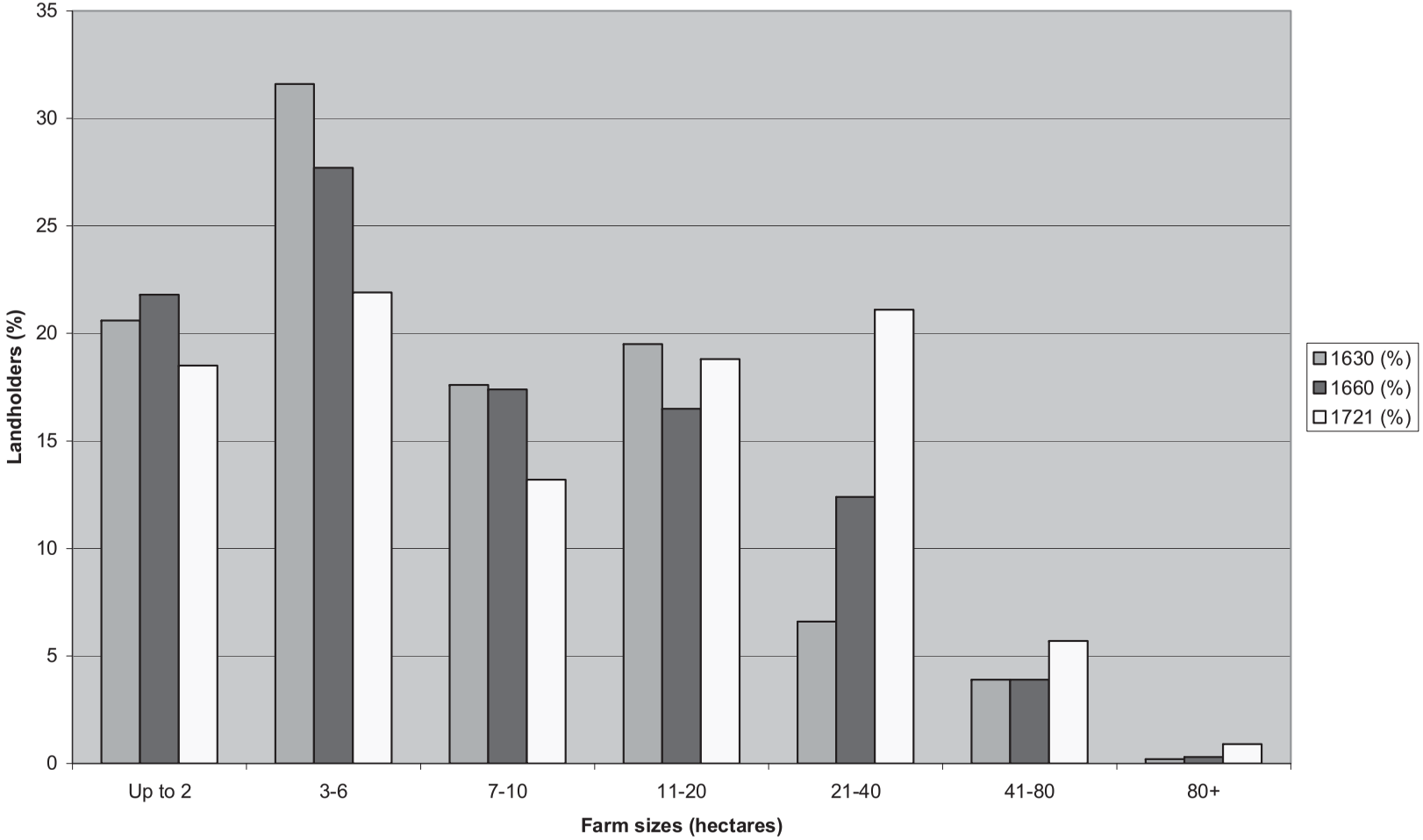


Figure 6.5 Farm sizes in the Oldambt, 1630-1721
Sources: GA, Archief Staten van Stad en Lande, nos 2133, 2139-41, 2143.

The build-up of medium-sized farms was not through the same reasons used to explain the emergence of exceptionally large farms, characteristic of the nineteenth-century Oldambt. Probably medium-farmers came to consolidate land through the misfortune of others around the mid-seventeenth century. Some small farmers were likely unable to withstand the cumulative effects of cattle plagues, repeated flooding and continuous malaria epidemics, and the lands of these men fell into the hands of those not ruined by these problems. As smaller farmers lost their herds of animals, this had a knock-on effect as enterprises turned slowly away from the mixed-farming pattern of arable and pasture, towards a heightened focus solely on arable farming.[847] Knottnerus has shown this process clearly in a series of tables, displaying both the increase in arable land from the late seventeenth century through to the nineteenth century, and the decline in the numbers of cattle.[848] By 1771, the cattle population of the Oldambt had been halved from what it stood in 1697, while arable extended across almost 60 percent of the total area – perhaps two to three times the level seen in 1662.[849] The Christmas Floods of 1717 and the second bout of pestilence in 1744 probably further stimulated the slow process of land consolidation.[850] Thus, around the mid-eighteenth century the Oldambt had begun to see some changes in the direction of farming and the first signs of consolidation of larger-sized farms, yet the economic polarisation and divide between rich and poor was still a thing of the future.

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[847] As suggested in de Vries, *The Dutch rural economy*, 171. More and more land was turned over to arable in the eighteenth century, for example, see R. van Schaik, 'Omvang en kwaliteit van het cultuurareaal in Groningerland tijdens de 16de en 17de eeuw', *Historisch-Geografisch Tijdschrift*, 2 (1984), table 1; J. Harten, 'De ontwikkeling van de landbouw in Groningen gedurende de achtiende en de negentiende eeuw', *Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap*, 83 (1966), 346-57; J. van Poel, 'De landbouw na 1800', in W. Formsma et al. (eds.), *Historie van Groningen. Stad en land* (Groningen, 1976), 512; *Heren en boeren. Een studie over de Commissieen van Landbouw (1801-1851)* (Wageningen, 1949), 49-57. Set in a general Western European phenomenon in B. Slicher van Bath, 'Agrarische produktiviteit in het pre-industriele Europa', in *Bijdragen tot de agrarische geschiedenis* (Utrecht, 1978), 180-5; *De agrarische geschiedenis van West-Europa*, 244-7.

[848] Knottnerus, 'Land kanaän', 59.

[849] GA, Gewestelijke Besturen, no. 574. On the pestilences of the eighteenth century see I. Matthey, 'Op fiscaal kompas; een bijdrage tot de economische geschiedenis van het gewest Groningen in de 17e en 18e eeuw, met toespitsing op de dorpen in de huidige gemeente Stedum', in *Westeremden; het verleden van een Gronings terpdorp* (Groningen, 1975), 261.

[850] T. Ufkes, 'De Kerstvloed van 1717. Oorzaken en gevolgen van een natuurramp' (unpublished PhD thesis, University of Groningen, 1984), 117-20.

6.4 Nineteenth-century economic polarisation: grand farms and sombre labourer houses

While some limited consolidation of farms had occurred by 1721, the consolidation of property in the Oldambt by the time of the 1832 cadastral survey was on a whole new level. The Gini-index by this point was 0.83; a far more skewed distribution of landholding than in 1630 when the Gini-index was 0.54. To emphasize what this Gini-index figure means, 0.83 is higher than the modern-day Gini-index for land distribution in Brazil, which is one of the most renowned unequal societies in the world.[851] While in 1721 there were still only six farmers with more than 80 hectares, comprising just one percent of the total Oldambt area, in 1832 almost a third of the Oldambt was in the hands of 31 exceptionally large farmers. Furthermore, another third of the Oldambt was in the hands of large farmers holding between 41 and 80 hectares, which meant that two-thirds of the Oldambt was controlled by a local farming elite. Emerging medium-sized farmers seen in 1721 now played an insubstantial role in the region. A big division had opened up between those two percent of the population who farmed a third of the land, and the 62 percent of the population who farmed less than two hectares each. In fact, many of these lowly sorts did not even reach two hectares, often cultivating tiny morsels consisting of a house plot and garden, where vegetables were grown. The trends generally follow what Richard Paping has shown for other areas of the Groningen claylands.[852] It was a real polarisation in fortunes, only exacerbated as the nineteenth century went on.

[851] Frankema, *Has Latin America always been unequal?*, 211.

[852] Paping, *Voor een handvol stuivers*, 71-4.

Table 6.2 Farm sizes in the Oldambt, 1630-1832

	No. of landholders				Total landholders (%)				Total land (%)			
Farm sizes (h)	**1630**	**1660**	**1721**	**1832**	**1630**	**1660**	**1721**	**1832**	**1630**	**1660**	**1721**	**1832**
1-2	178	169	126	913	20.6	21.8	18.5	62.4	2.2	2	0.9	1.4
3-6	274	214	149	136	31.6	27.7	21.9	9.3	13.2	9.8	5.6	3
7-10	152	135	90	53	17.6	17.4	13.2	3.6	15.2	12.8	7.1	2.3
11-20	169	128	128	88	19.5	16.5	18.8	6	28.7	22.5	19.7	7.2
21-40	57	96	144	130	6.6	12.4	21.1	8.9	18.1	30.9	40.8	21.3
41-80	34	30	39	113	3.9	3.9	5.7	7.7	20.3	19.2	19.9	33.9
80+	2	2	6	30	0.2	0.3	0.9	2.1	2.3	2.8	6	31
Total	**866**	**774**	**682**	**1463**	**100**	**100**	**100.1**	**100**	**100**	**100**	**100**	**100**

Sources: GA, Archief Staten van Stad en Lande, nos 2133, 2139-41, 2143; GA, Kadaster, 1832.

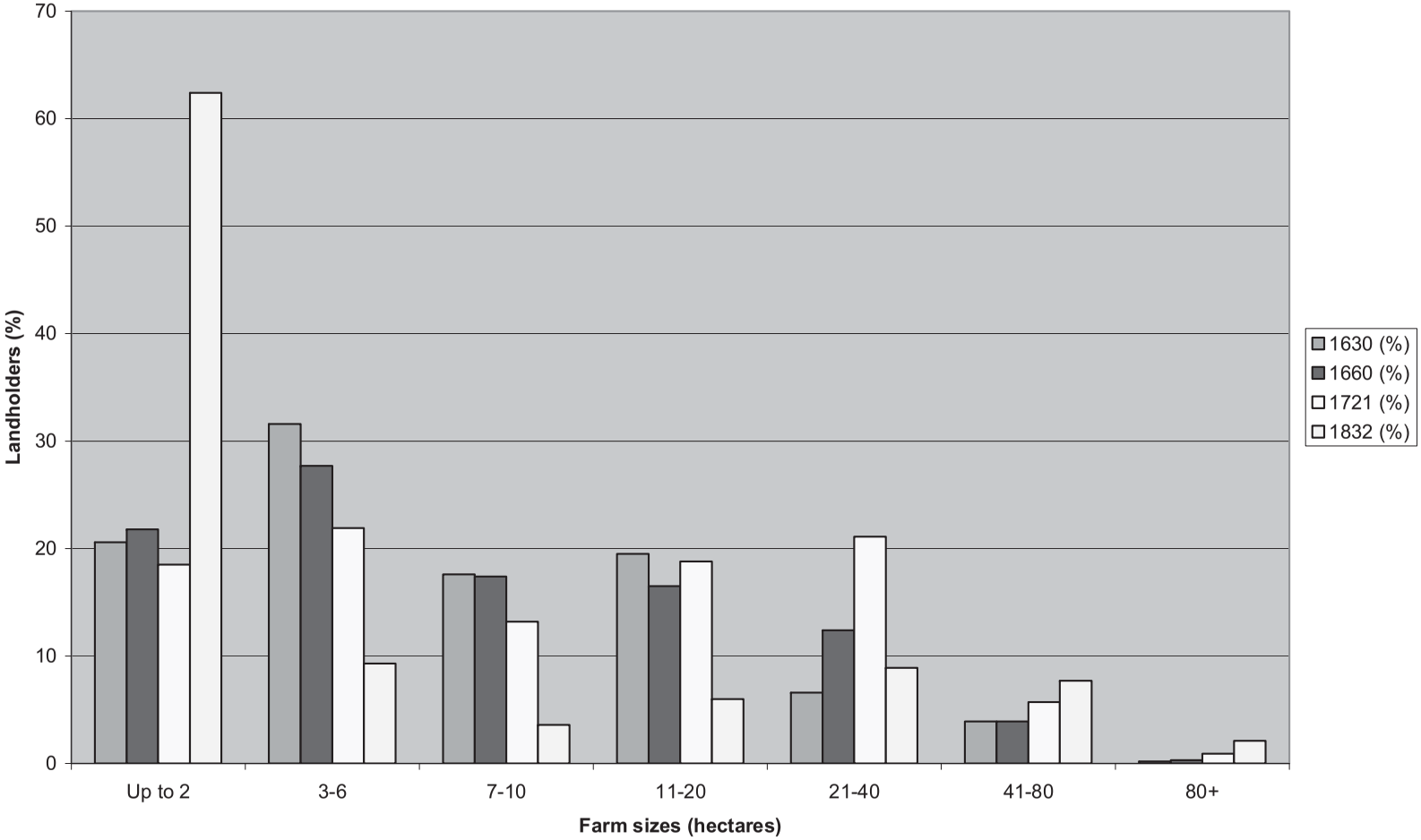

Figure 6.6 Farm sizes in the Oldambt, 1630-1832 (divided by total landholders)

Sources: GA, Archief Staten van Stad en Lande, nos 2133, 2139-41, 2143; GA, Kadaster, 1832.

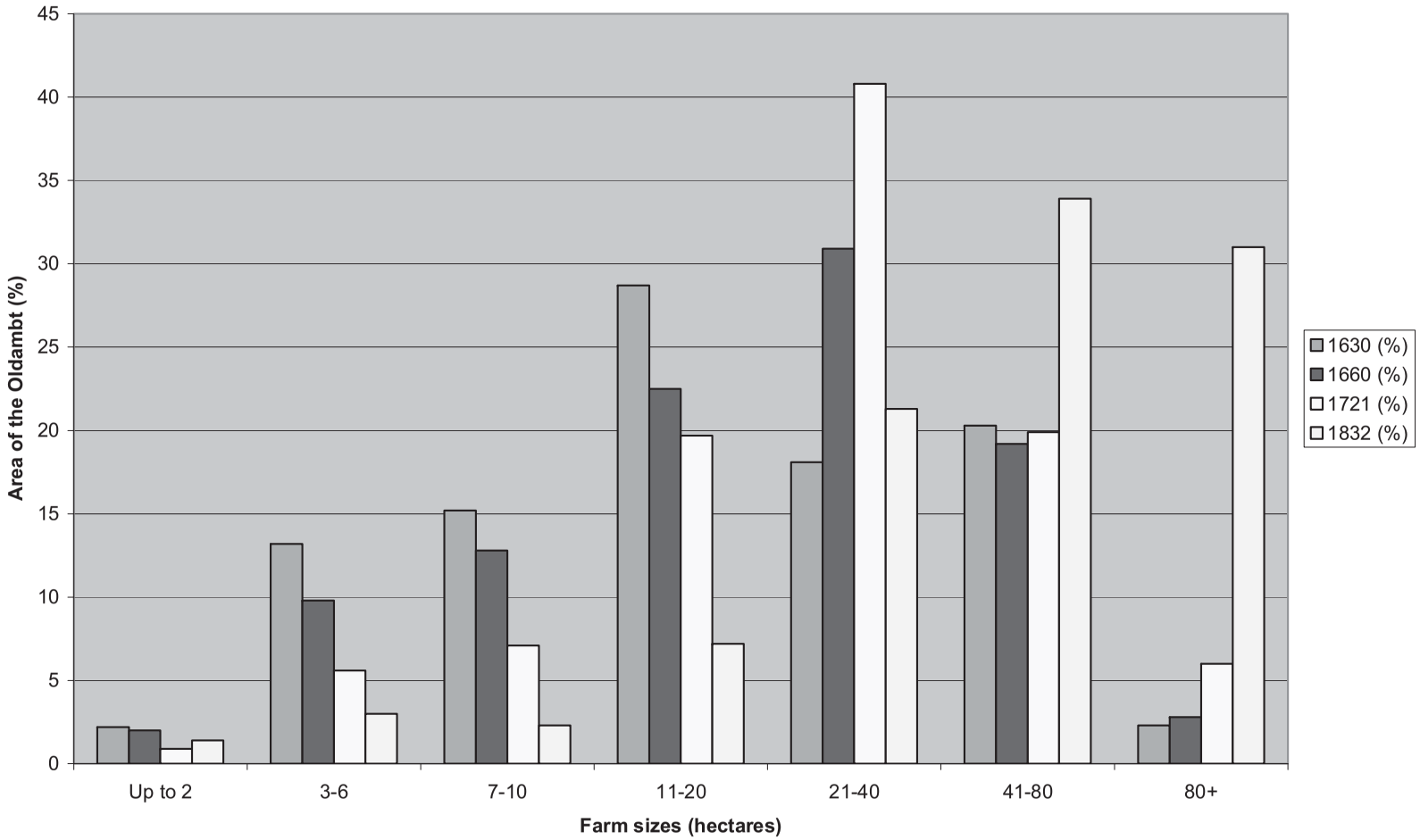

Figure 6.7 Farm sizes in the Oldambt, 1630-1832 (divided by total area)

Sources: GA, Archief Staten van Stad en Lande, nos 2133, 2139-41, 2143; GA, Kadaster, 1832.

It was in the nineteenth century that the classic dichotomy between the successful, wealthy farmers and the poor, disadvantaged agricultural labourers became clearer; the former residing in large farmhouses of almost aristocratic grandeur in design, and the later confined to small, sombre hovels, often sinking into the mud on the peaty edges of the Dollard. A large pool of literature has been devoted to the emergence of the *herenboeren* in Groningen, and the Oldambt has some of the most typical examples of the 'gentleman farmer'. Numerous travellers to the Oldambt in the late eighteenth and nineteenth centuries commented with surprise on the size and splendour of the farms.[853] From the late eighteenth century, the farms changed in design with both living-quarters and barns all under one roof, and the sheds lengthened in order to store more produce.[854] The literature has focused not just on the heightened importance of arable cultivation or the commercial orientation of the enterprises, but also the development of a new enlightened culture of farmer, at odds with the more pious farming culture of the eighteenth century.[855] These large farmers of nineteenth-century Oldambt were interested in science and philosophy, were influenced by agricultural ideas from the university, had hoards of books and paintings, and were anxious to turn economic success into political influence.[856] The

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[853] See, for example, NADH, Archief familie van Hogendorp, no. 186; J. van Lennep, *Nederland in den goeden ouden tijd zijnde het dagboek van hunne reis te voet, per trekschuit en per diligence van Jacob van Lennep en zijn vriend Dirk van Hogendorp door de Noord-Nederlandsche provintien in den jare 1823*, ed. M. Elisabeth Kluit (Utrecht, 1942), 91-5; J. Marshall, *Travels through Holland, Flanders, Germany, Denmark, Sweden, Lapland, Russia, the Ukraine and Poland in the years 1768, 1769, and 1770*, i (London, 1772), 190; A. Fischer, *Lotgevallen op eene reize van Riga, over Holland, door Spanjen en een gedeelte van Italien* (Amsterdam, 1802), 18; D. de Roo van Alderwerelt, 'Een reis door Friesland, Drente, en Groningen in het jaar 1845', *De Vrije Fries*, 48 (1968), 22. Also see I. Botke, 'Hier werd ons oog verrukt. Het oordeel van vreemdelingen over de Groninger boer in de negentiende eeuw', *Stad en Lande. Cultuur-Historisch Tijdschrift voor Groningen*, 4 (1995), 13-9.

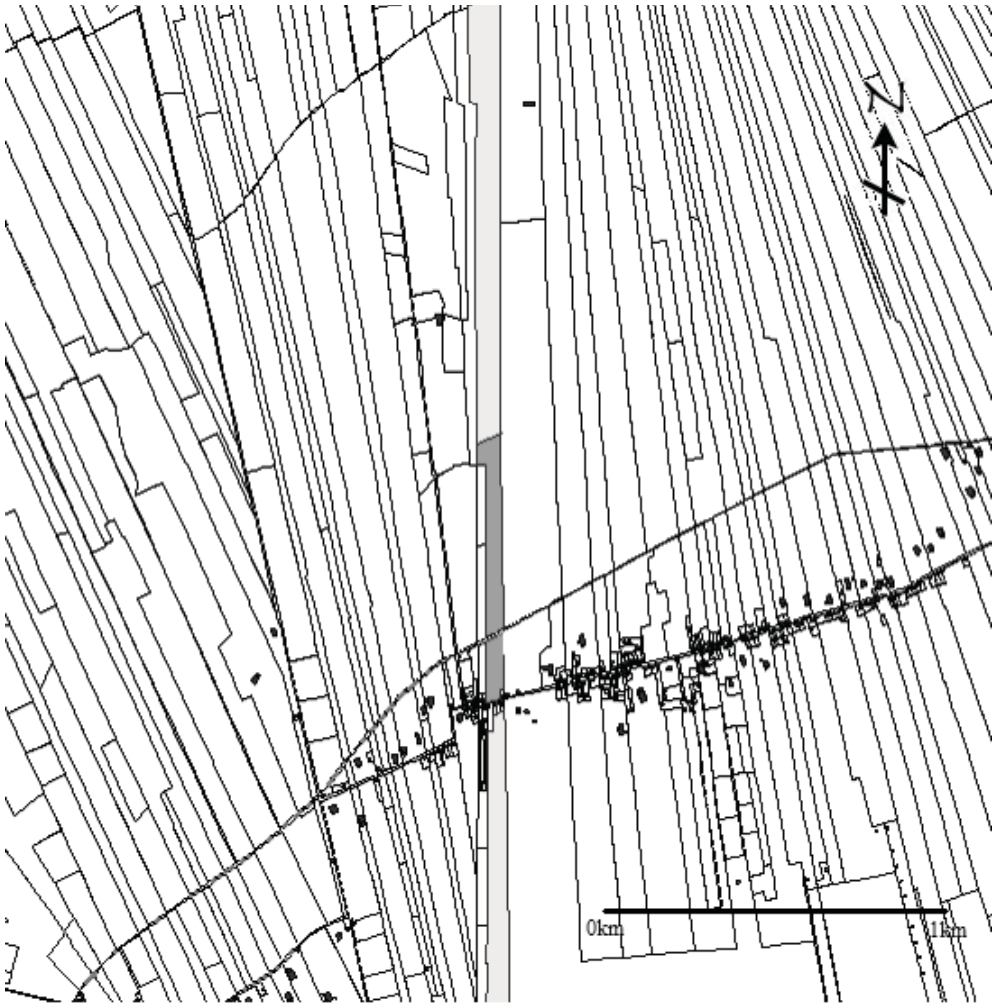
[854] P. Havik, 'De Oldambster boerderij', in O. Knottnerus, P. Brood, W. Deeters & H. van Lengen (eds.), *Rund um Eems und Dollart. Historische erkundungen im grensgebiet der Nordostniederlande und Nordwestdeutschlands* (Groningen, 1992), 291.

[855] It has now been strongly argued that so-called liberal and forward-thinking ideologies of the Oldambt farmers actually only appeared in the nineteenth century. See Knottnerus, 'Land kanaän', 35-9; 'Het Oldambt in de achttiende eeuw – een inleiding', in H. Perton (ed.), *Het loeit in het Oldambt. Kroniek van de boerenopstand van 1748* (Scheemda, 1998), 9-37.

[856] See in particular I. Botke, *Boer en heer. 'De Groninger boer' 1760-1960* (Groningen, 2002). Also I. Botke, *De golden kette. Het Oldambt 1875: paradijs van de boeren* (Scheemda-Veendam, 1994); ''k had nooit in mijn stoutste dromen eenigzins gedacht'. De wording van een nieuwe plattelandselite', in I. Botke & H. Maring (eds.), *De Groninger boer. De wording van een nieuwe plattelandselite 1775-1875* (Leeuwarden, 1999), 5-60; 'Provinciaal, maar niet zonder smaak. Schilders, ververs, glazenmakers en de Groninger boerenwoning in de eerste helft van de negentiende eeuw. Een verkenning', *Veenkoloniale Volksalmanak. Jaarboek voor de Geschiedenis van de Groninger Veenkolonien*, 8 (1996), 9-37; "Van de

most successful farmers went on not only to dominate village politics but also got involved in provincial affairs.[857]

Figure 6.8 Midwolda, 1832. Linear village settlement with elongated, strip consolidation into the Oud-Nieuwland[858]



boer hangt alles of'. De Groninger landbouwer in eigen en andermans ogen, 1800-1900', in P. Boekholt, A. Huussen jr., P. Kooij, F. Postma & H. Wedman (eds.), *Rondom de reductie. Vierhonderd jaar provincie Groningen 1594-1994* (Groningen, 1994), 287-308; L. Boer, 'Een Oldambster herenboer op het Haagse pluche. J.F. Zijlker (1805-1868) en het Oldambt', *Veenkoloniale Volksalmanak. Jaarboek voor de Geschiedenis van de Groninger Veenkolonien*, 11 (1999), 9-22; W. Doornbos, 'De Groningers en hun boeken', *Gruoninga. Jaarboek voor Genealogie, Naam- en Wapenkunde*, 41-2 (1996-7), 160-70; A. Schuurman, *Materiële cultuur en levenstijl. Een onderzoek naar de taal der dingen op het Nederlandse platteland in de negentiende eeuw: de Zaanstreek, Oost-Groningen, Oost-Brabant* (Wageningen, 1989); U. Goudschaal, *Herinneringen uit mijn bijna zeventigjaren leeftijd* (Groningen, 1877), 14.

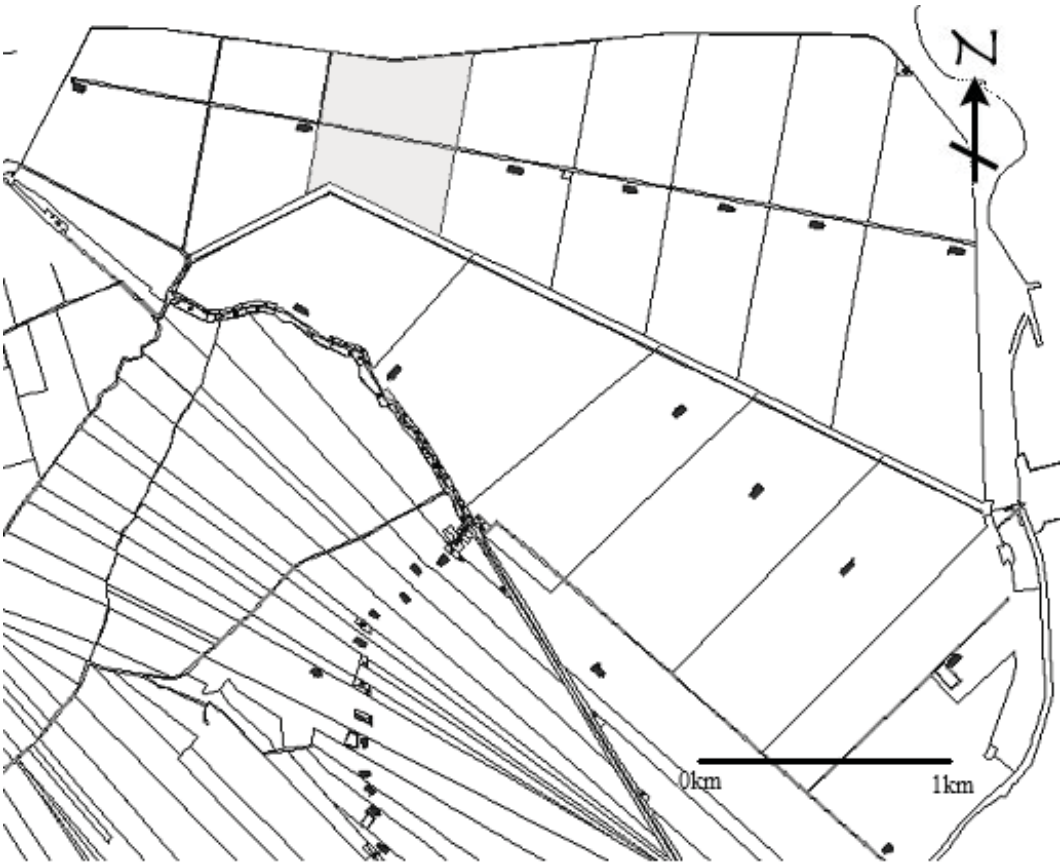
[857] Formsma, *Beklemrecht en landbouw*, 98-108. Also a feature in Friesland, see M. Blauw, *Van Friese grond. Agrarische eigendoms- en gebruiksverhoudingen en de ontwikkelingen in de Friese landbouw in de negentiende eeuw* (Leeuwarden, 1995), 251-3.

[858] Hoving Jurjen Harms holding highlighted in light shading, his pasture in dark shading.

Some of the large farmers had their farmhouses within the linear villages on the sandy ridges, and had consolidated their land lengthways into the polders in narrow strips. The farmhouse of Hoving Jurjen Harms is a representative example. In 1832 he had a farmhouse (now the Herman Dijkstra museum) on the north side of the main street through Midwolda, which lay opposite the fourteenth century aristocratic residence of the Ennemaborg. His 78 hectares of land extended in a long narrow strip barely wider than the farmhouse itself. It extended two or three kilometres northwards into the polderland known as the 'Oud-Nieuwland', which had been reclaimed by 1665, and the property ended when it met up with the 'Oude Geut' canal halfway between Midwolda and Nieuwolda, a natural boundary.

The large farms on the newer polders (reclaimed from at least the late seventeenth century onwards) such as the 15 farms on the Kroon- and Stadspolders were arranged slightly differently to the farms in the villages. Here land was consolidated more around the farmhouse in one coherent block, as seen below.

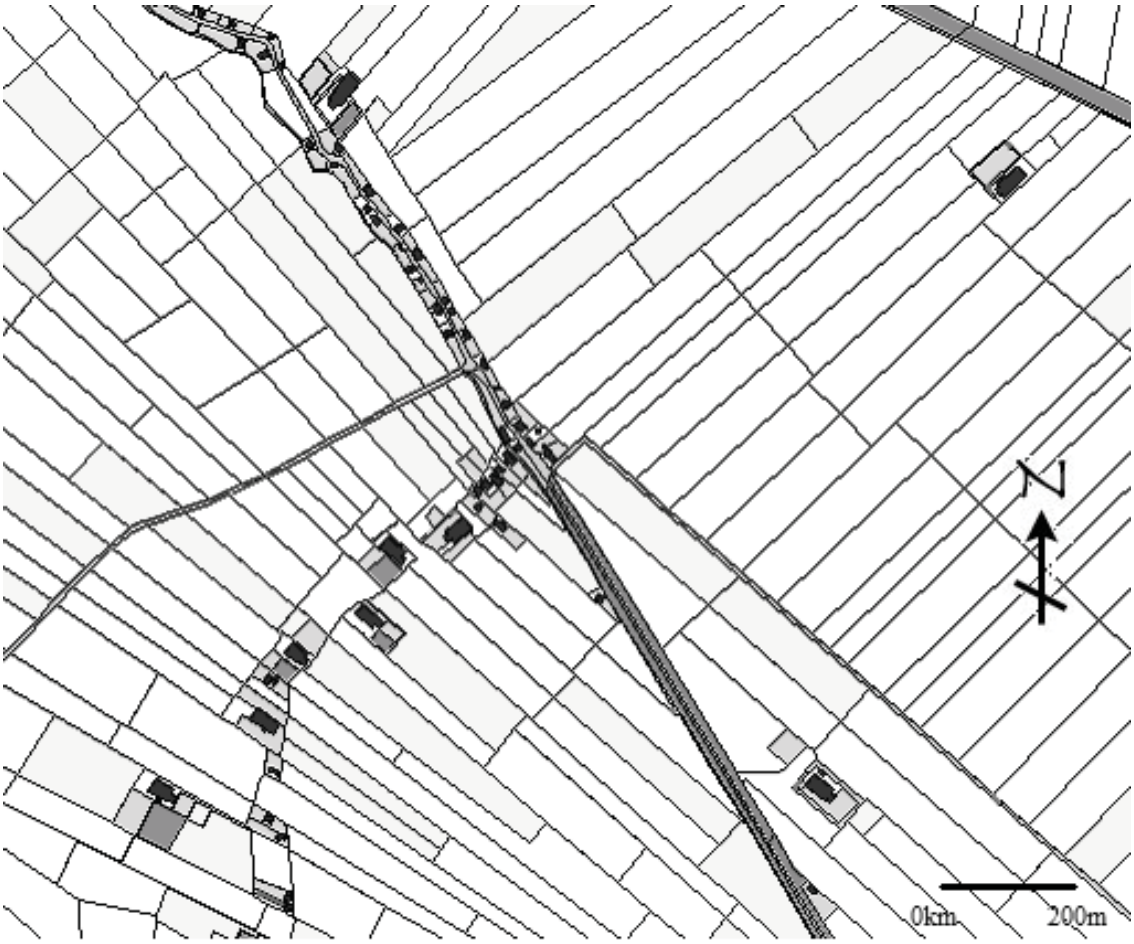
Figure 6.9 The 15 farms on the Kroonpolder and Stadspolder, 1832. Dispersed farms with consolidated holdings[859]



[859] Evert Derks Evers' farm shaded in grey.

In contrast to the grand isolated farmhouses stuck out on the polders, a network of small villages and hamlets grew up on the edges of the Dollard, often on peat soils where plots were leased out by large farmers, in order to secure a constant base of settled labour.[860] These were true 'labour pools'; places like Drieborg, Hongerige Wolf, Kromme Elleboog, and Ganzedijk.

Figure 6.10 Labour village in the polders, 1832: Drieborg



Another variation was the example of Nieuwe Beerta, where a row of important farmhouses were lined up along a main street, and a separate cluster of labourer houses was attached at the end.[861] Labourer housing expanded even further in the later stages of the nineteenth century, sometimes purposely built by city

[860] The developing settlement pattern of the labourers is noted in A. Schuurman, 'Tussen 'beschaving' en 'verwildering': de ontwikkeling van de materiele cultuur van de boeren in oost-Groningen in de negetiende eeuw', in Elerie & Hoppenbrouwers (eds.) *Het Oldambt*, 117.

[861] E. Hofstee, *Het Oldambt. Een sociografie. Deel I: vormende krachten* (Groningen, 1937), 222.

institutions so labourers could work city-owned farms.[862] The spatial separation of labourer and farmer on the polders did not apply to the older linear villages such as Midwolda, Finsterwolde, or Beerta, however. Here, labourers and large farmers lived intermixed, although some of the labourers congregated themselves on side-roads emanating from the main streets.[863]

Figure 6.11 Variation in labour village development, 1832: Nieuw Beerta

Figure 6.12 Mixed settlement of farmers and labourers, 1832: Finsterwolde

[862] For example in Beerta and Finsterwolde, see GA, Gemeentebestuur van Groningen (3), 1916-1965, 1841, no. 1324.

[863] On the spatial relationship between labourer housing and farmhouses see J. de Boer, 'Dorpen in Groningen', *Noorderbreedte*, 12.5 (1988), 145-51.

6.5 Property structures and demographic and settlement expansion

If the Oldambt was still quite an equitable society in 1721, why had the same region descended into fierce political antagonism and labourer strikes by 1929? In this section, it is suggested the reasons can be found in the particular configuration of three property structures taken in combination with demographic expansion.

A: *Beklemrecht*

A first major factor in the late development of polarisation in the Oldambt was the specific circumstances surrounding the proliferation of the long-term hereditary leases known as *beklemrecht* in Groningen, which took off from the mid-eighteenth century. The rules concerning this lease contract are contained in a '*beklembrief*' addressing eight hectares of land in Nieuwolda in 1739. It noted that the land under *beklemming* should follow a hereditary line with the tenant, could be used to the tenant's own pleasure, with a fixed yearly rent that could not be lowered or raised, and a one-off purchase fee (which may explain why landlords chose *beklemrecht*). The tenant's rights to the land were so strong that by the end of the eighteenth century it would be a fallacy to even describe these Oldambt farmers as 'tenants'. Indeed, when the province was forced to sell-off its former monastery lands between 1764 and 1773, a significant portion went to rural nobles and elite urban landowners in the Ommelanden, yet in the Oldambt about a quarter of the purchasers were the existing tenants in *beklemming*, who essentially became owners.[864] By the nineteenth century many lands in the Oldambt leased by urban institutions to farmers in *beklemming* were sold to the stewards outright.[865]

The *beklemrecht* lease gave full inalienable rights of the land to the tenant farmer,[866] whereby it could not be split into smaller pieces without the consent of both parties. The system developed in the first instance in the sixteenth century, replacing what had been a dominant method of short-term lease prevalent in other parts of the Low Countries. However, the security to the land for the tenant farmer

[864] H. Feenstra, *De bloeitijd en het verval van de Ommelander adel (1600-1800)* (Groningen, 1981), 31-33, 360; R. Paping, 'De Groningse provinciale rekeningen van de voormalige kloosterlanderijen', in R. van Synghel (ed.), *Broncommentaren. Bronnen betreffende de registratie van onroerend goed in de Middeleeuwen en Ancien Regime* (The Hague, 2001), 116.

[865] GA, Losse stukken Register Feith, meest charters, 1246-1864, 2241, no. 1034; GA, Gemeentebestuur van Groningen (1), 1816-1916, 1399, no. 4276.

[866] In contrast to the more insecure tenancies in neighbouring Friesland after 1700. M. Knibbe, *Lokkich Fryslan. Een studie naar de ontwikkeling van de productiviteit van de Friese landbouw, 1505-1830* (Wageningen, 2006), chp 4.

only established itself fully in the eighteenth century, which has parallels with elsewhere in the Netherlands such as in the Over-Betuwe (Gelderland).[867] *Beklemrecht* found a foothold and perpetuated itself in the province of Groningen for two reasons. The first was the right that the tenant had to build a house on the leased land. The owner had to reimburse the costs, often quite high since the farms were large and built of stone and brick.[868] If the tenant broke the agreement, then he paid back all the costs to the owner; therefore both parties had an interest in preserving the contract and stability in the integrity of the landholdings, which were truly tied to the house. The second was connected to the *Reductie van Groningen* in 1594 whereby all monastic property was secularised and passed into the hands of Groningen city and province. Most of this land was leased out on fixed perpetual terms, contributing to a culture of long-term leasing.[869]

The proliferation of the long-term, hereditary, fixed lease in the Oldambt (and elsewhere on the clay soils of Groningen) directly contributed to economic polarisation from the late eighteenth century onwards. From the mid-eighteenth century onwards, farmers enjoyed simultaneously high prices for their agricultural produce, and rents which were fixed and could not be raised by the blood-owners of the land. Prices for grain in the province of Groningen were at their highest during the years around 1800, and were two or occasionally three times as high as they were in 1700.[870] A farming elite emerged by investing their increasing surpluses in their own agricultural enterprises, intensifying and bringing more land under cultivation, consolidating more land, investing in better drainage systems, and constructing grandiose farmhouses and farm buildings. Larger farmers also were aided in their consolidation of agriculture by their ease of access to credit facilities, which they had obtained by their increasingly extensive social networks and political influence at village level.[871] As the farmers of the Oldambt saw their profits soar, and agriculture become intensified and more commercialised, more and more land was put under the plough, while the growing of fodder crops meant that less pasture was needed for the

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[867] Brusse, *Overleven door ondernemen*.

[868] Bricks were produced for farms in Groningen even as early as the Middle Ages, as described in O. Knottnerus, 'Baksteenproductie in Groningen 1200-1650', *Stad & Lande*, 18.3 (2009), 18-21; K. Emmens, 'Terug naar het begin. De introductie van baksteen in Groningen en Friesland', *Stad en Lande*, 18.3 (2009), 10-5.

[869] Priester, *De economische ontwikkeling van de landbouw in Groningen*, 110.

[870] W. Tijms, *Groninger graanprijzen. De prijzen van agrarische producten tussen 1546 en 1990* (Wageningen, 2000).

[871] O. Knottnerus, 'Yeoman and farmers in the Wadden Sea coastal marshes, c. 1500-1900', in van Bavel & Hoppenbrouwers (eds.), *Landholding and land transfer*, 26.

animals which provided the manure. The concern over intensifying the arable cultivation on the newer polders from the eighteenth cenury onwards is reflected in an ordinance from the city in 1742, which forbade the grazing of sheep and cows on the new Groninger and Egypter dikes behind the Kroonpolder.[872] By 1910, only around four percent of land on the newer polders was devoted to pasture, which stands out when compared with a tax register from 1662 which shows the Oldambt to have only around 30 percent of the land under grain cultivation.[873] The newer polders had more arable land than in the older polders, peat edges and sandy soils, and were probably the most fertile soils in the whole of the Low Countries.[874] Numerous corn mills from the eighteenth century began to appear in areas of the Oldambt outside the older villages, for example on the Kroonpolder and Oostwolderhamrik, to cater for the increased demand in milling grain.[875] Such increased scale of production further played into the hands of large elite farmers as new technological innovations such as horse-driven churns and winnowing mills could only be worked by large farms.[876]

B: Urban investment and landownership

Economic polarisation was further perpetuated by the increasingly high levels of absentee landownership in the Oldambt, particularly by urban institutions and burghers. Using the fiscal registers from 1721, it is suggested that urban social groups owned around 44 percent of the land in the region at this time.[877] Just a third of the

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[872] GA, Plakkaten en ordonnanties GAG, 1595-1795, no. 527.

[873] P. Priester, 'De economische ontwikkeling van de landbouw in het Oldambt in de negentiende eeuw', in Elerie & Hoppenbrouwers (eds.), *Het Oldambt*, 102. For 1662, see GA, Ommelander Archief, no. 1058.

[874] Perhaps only the polders of Zeeland and Zeeuws-Vlaanderen can compare. See van Cruyningen, *Behoudend maar buigzaam*, 181-7.

[875] For the appearance of new mills on the new polders, see O. Knottnerus, 'De korenmolens in Oost-Groningen vóór 1855: met een overzicht van de molens in de gemeente Menterwolde', <http://ottoknot.home.xs4all.nl/werk/>; R. Paping, 'Industriële windmolens op de Groninger klei 1770-1860', *Jaarboek voor Geschiedenis van Bedrijf en Techniek*, 9 (1992), 69-94; 'Industriële windmolens op de Groninger klei 1770-1860, deel 1: koren en pelmolens', *De Nieuwe Zelfzwicht*, 1 (1997), 2-9. For the new mills on Kroonpolder and Oostwolderhamrik see B. Poppen, *De belasting op het gemaal in Stad en Ommeland 1594-1856* (Uithuizen, 2004), 265; *Molenbestand in de gemeente Scheemda* (Groningen, 1996), no. 892.

[876] Priester, *De economische ontwikkeling*, 99-103; J. van der Poel, *Honderd jaar landbouwmechanisatie in Nederland* (Wageningen, 1983), 37-44.

[877] The *verpondingen* do not give all the explicit occupational or social categories of landowners. This information had to be extracted from cross-referencing a number of works. GA, 'Lijst van gezagsdragers vermeld in het Regeringsboek afkomstig uit het Gemeente-archief Groningen, 1594 – ca. 1811',

land was owned by non-noble local people (i.e. farmers), and the proportion of landowners who farmed the soil they owned was even lower, at 29 percent (because some land was owned by *rentier* widows). Thus, 71 percent of land in the Oldambt was being used by a third party.

Table 6.3 Social distribution of landownership in the Oldambt, 1721 (%)

	The Oldambt, 1721	**Groningen clay-areas, 1755** [878]
Rural nobles	3	12
Province administration	7	21
Ommelanden administration	1	1
Ecclesiastical institutions	13	17
Lay institutions	min.	n/a
Urban institutions & burghers	44	22
Farmers	33	25

Source: GA, Staten van Stad en Lande, 1, no. 2143.

The problem with the *verpondingen* however, is that we cannot make a systematic comparison of the social distribution of landownership in 1721, with the situations in 1660 or 1630. We can compare size of farms at the user level, but not social composition of ownership. The reason for this is that the 1721 *verpondingkohier* is the only version which explicitly separates owners and users.[879] Thus, all we can say at present is that there was a high level of urban landownership in the Oldambt in 1721. Whether that was already the case in say 1650, we cannot be sure. However, through indirect evidence it is suggested here that the city of Groningen and its burghers likely expanded their landownership in the Oldambt from the late seventeenth century onwards.

The expansion in urban landowning was highly likely given the increased urban finance put into the reclamation of new polders. These new polders were not created in the same way as the 'older ones' (colonist farmers using the '*recht van*

<http://files.archieven.nl/5/f/1700/1700_16.pdf>; S. Abels, *Doopsgezinde families in het Oldambt (1520-1811)* (Eexterzandvoort, 2002); T. Boelema-Diddens (ed.), *Boerderijen en hun inwoners in Noord- en Zuidbroek* (Zuidbroek, 1990); Stichting Boerderijenboek Wold-Oldambt (ed.), *De boerderijen in het 'Wold-Oldambt'. Scheemda, Midwolda, Ekamp, Meerland, Heiligerlee, Westerlee, Meerden* (2 vols, Scheemda, 1997); H. Feenstra, *Spinnen in het web. Groningse regenten in relatie tot het omringende platteland tijdens de Republiek* (Assen, 2007).

[878] Comprising Hunsingo, Fivelingo and the N-W Kwartier from the '*grastallen*' of 1755 found in Paping, *Voor een handvol stuivers*, 184.

[879] R. Paping, 'De Groningse verpondingsregisters', *Broncommentaren*, 4 (1985), 331.

opstrek' into the wastes), and looked different.[880] Instead, city institutions and burghers provided large amounts of capital investment to employ large pools of labour for the reclamation tasks, in the process digging new dikes and incorporating new drainage mills.[881] The Drieborg Kroonpolder was reclaimed from the sea in 1696 and then the Stadspolder in 1740, which just from its name can highlight the role that the city played in the colonisation process.[882] A map from 1699 shows the extent of the newly won land around Midwolda, Oostwold and Oostwolder Hamrik, and a map from 1690 shows land reclaimed around Beerta, Nieuwe Beerta and Ulsda.[883] If urban landownership in the Oldambt was high in 1721, then further reclamation projects only increased that percentage as we can see from charters which show large portions of land in the seventeenth and eighteenth centuries from these new polders being sold to officials of the city.[884] Despite financial difficulties in the nineteenth century, the city of Groningen owned over 400 hectares on the Oldambt polders in 1832, of which some of that constituted marshes.[885] The city also had rights to the water behind the polders.

Later in the eighteenth century the Oostwolder Polder was reclaimed, followed by the Finsterwolder Polder in 1819, although the Groningen institutions had slightly less ownership in these two areas, for example, just 116 hectares on the last named polder. A visual illustration of the differences between the city's land ownership and reclamation on the Finsterwolder Polder and the Stadspolder is shown in a map centred on the hamlet of Hongerige Wolf.[886] On the 27th of July 1819, the city decided to sell the property rights over its *beklemmingen* on the Finsterwolder Polder for 90,000 guilders, reflective of its general financial troubles.[887] Nonetheless the city did have great influence over the further reclamation of the Reiderwolderpolder in 1869, the marshes to the north of the Stadspolder in

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[880] For a comparative example in the old and new reclaimed areas of coastal Flanders, see N. Vanslembrouck, E. Thoen & A. Lehouck, 'Past landscapes and present-day techniques. Reconstructing submerged medieval landscapes in the western part of Sealand Flanders', *LH*, 27 (2005), 5-18; P. van Cruyningen, 'Profits and risks in drainage projects in Staats-Vlaanderen, c. 1590-1665', *Jaarboek voor Ecologische Geschiedenis* (2005/6), 123-42.

[881] M. Schroor, *Wotter. Waterstaat en waterschappen in de provincie Groningen, 1850-1995* (Groningen, 1995), 58.

[882] See the map in GA, Kaartenverzameling, no. 1307.

[883] GA, Kaartenverzameling, no. 990-1.

[884] GA, Losse stukken Register Feith, meest charters, 1246-1864, 2241, nos 353, 371, 456, 467, 499, 535, 668, 766, 776, 854, 880, 903, 909, 936-7, 944, 957, 1017, 1019-20, 1029.

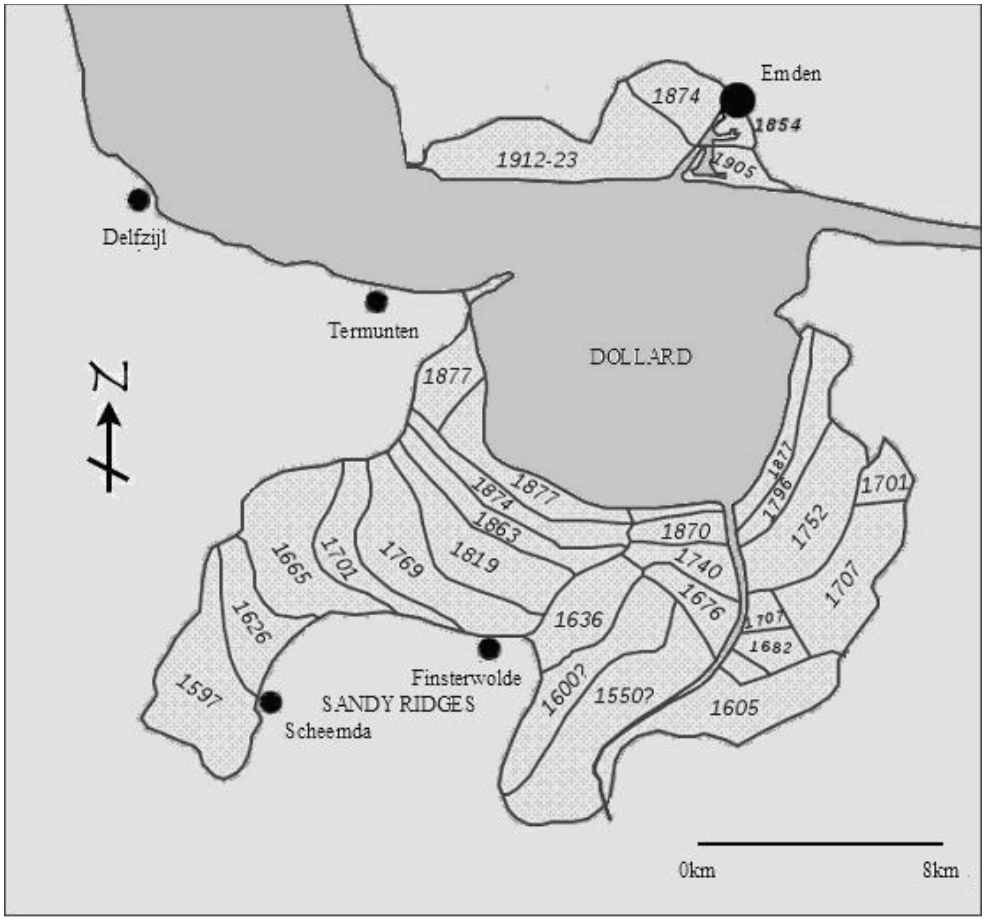
[885] GA, Kadaster, 1832.

[886] GA, Kaartenverzameling, no. 1311.

[887] GA, Gemeentebestuur van Groningen (1), 1816-1916, 1399, no. 3584.

1874, and finally the Carel Coenraadpolder in 1924 where Groningen self-exploited three farms comprising 162 hectares until 1985.[888] In the eastern parts of the Reiderwolderpolder, around 202 hectares belonged to the city. The Johannes Kerkhovenpolder was reclaimed in 1874 through large investments by a banker from Amsterdam, whose family had a long association with tea plantations in the Dutch Indies.[889]

Figure 6.13 Development of the polders in the Dollard, c.1550-1923



Adapted from: J. Kirchhoff, *Über den strassen van Torum* (Risius, 1992).

The reclamation of the Finsterwolder and Oostwolder Polders was undertaken through a combined effort of absentee landowners (rather than urban or provincial administrative institutions), though many still had links to the city of Groningen

[888] M. Schroor, *Stadsstaat Groningen: de Groninger stadsrechten en buitenbezittingen 1612-2000* (Groningen, 1999), 179.

[889] On the reclamation of this polder see D. Vis, *De Johannes Kerkhovenpolder: een episode uit de herovering van de Dollard* (Hoorn, 1962); R. Feith (ed.), *Archief der maatschappij tot exploitatie van den Johannes Kerkhovenpolder* (Groninen, 1902). The family's exploits in the Dutch Indies described in H. Haasse, *Heren van de thee* (Amsterdam, 1994).

(governors or notable office holders of the city, wealthy clerics, but also some rich local *rentiers* as well). These wealthy individuals bought the rights to huge swaths of mud and salt marsh which backed onto their newly acquired lands, and many charters recording the transfer of land mention 'considerable' access to the wastes.[890] For example, the cadastre of 1832 showed that Johan Hora Siccama van Slochteren owned hundreds of hectares of land in the Finsterwolder Polder, Oostwolder Polder and around Nieuwolda.[891] Although the cadastre suggested he actually lived in nearby Slochteren (and was mayor there in 1811), it is clear he was part of the Siccama family which throughout the eighteenth century had occupied important administrative offices in Groningen.[892] Indeed, his namesake and father had served as a councillor in Groningen as well as chairing the *Nationale Vergadering* in The Hague. Siccama van Slochteren was in 1817 a member of the '*Societé Royale d'Ariculture et de Botanique'* in Ghent, and had written in 1826 a complete doctoral thesis at the Rijksuniversiteit Groningen.[893] He was also a member of the Second Chamber (*de Tweede Kamer*). As the map below shows, this important governor had purchased the rights to masses of uncultivated land behind his holding. As well as his 54 hectare farmlands on the polder, he also had the rights to 72 hectares of salt marsh and 458 hectares of wet mud. It was men of high status like Siccama van Slochteren that were the driving force behind the reclamation of new polders.

[890] For example, GA, Losse stukken Register Feith, meest charters, 1246-1864, 2241, no. 880.

[891] Although he had actually died in 1829 in Brussels before the cadastre was finalised. W. Formsma, R. Luitjens-Dijkveld Stol & A. Pathuis, *De Ommelander borgen en steenhuizen* (Assen, 1987), 369.

[892] For the history of this family see A. Fokkema-Siccama, *De Siccama's* (Kollum, 1973).

[893] GA, Families Siccama, Hora Siccama, Hora Siccama van Harkstede en Rengers Hora Siccama, 1597-1970, 535, nos 65, 496.

Figure 6.14 Farm and its wastes on the Finsterwolder Polder, 1832

Why were urban groups able to invest so heavily in the Oldambt from around the late seventeenth century onwards? Certainly it had very little to do with direct application of jurisdictions, since the people of the Oldambt had enjoyed a long tradition of independence and autonomy. Much of this came from the peculiar geographical and environmental conditions in the east of the province, as the Oldambt was separated from the city by a large area of difficult peat and marshland, which was almost impassable in places and made more problematic by the terrible state of the roads.[894] Up to the sixteenth century, the farmers of the Oldambt had rarely used the Groningen market for trade, which explains why the rules of the '*stapelrecht*' only applied for the Ommelanden, and not for the Oldambt.[895] Oldambt producers instead always looked east towards Emden, for example, the Grijzemonniken monastery shipped 25,000 kilo of barley to the Westfalen in exchange for wheat in 1493.[896] The *stapelrecht* was a body of legislation confirmed in the first half of the sixteenth century, although was undoubtedly influenced by an earlier agreement made by Groninger merchants in the thirteenth century.[897] It stipulated that farmers of the surrounding rural hinterland had to bring their produce to the city of Groningen first, before being distributed out, effectively serving as a monopoly. It also forbade certain economic activities in the countryside such as the brewing of beer, which was only allowed in the city.[898]

The city tried in the sixteenth and seventeenth centuries to bring the Oldambt to heel, but was met with stubborn resistance. For example, the city tried to improve the transport connections to the Westfalen by building canals through the Oldambt.[899] The first attempts in the late sixteenth century were not successful and

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[894] O. Knottnerus, 'Culture and society in the Frisian and German North Sea coastal marshes (1500-1800)', in S. Ciriacono (ed.), *Eau et développement dans l'Europe moderne* (Paris, 2004), 144.

[895] J. van den Broek, 'Graven bij Stootshorn. De verbinding tussen Groningen en het Oldambt gedurende de oorlogsjaren 1580-1594', in Collenteur et al. (eds.), *Stad en regio*, 100.

[896] E. Friedländer (ed.), *Ostfriesisches Urkundenbuch*, ii (Emden, 1881), no. 112.

[897] J. van den Broek, *Groningen, een stad apart. Over het verleden van een eigenzinnige stad (1000-1600)* (Assen, 2007), 63-5. See also P. Bos, *Groningsche gild- en stapelrecht tot de Reductie in 1594* (Groningen, 1904). Other towns in the Netherlands invoked this legislation from the Middle Ages onwards, for example see D. Beulink, 'Dordrecht en Schoonhoven: conflicten over stapel- en marktrecht', *Historische Encyclopedie Krimpenerwaard*, 14 (1989), 61-88; J. Dijkman, 'Dordrecht and its neighbours. A survey of the origins and effects of the 14th-century Dordrecht staple market' (unpublished paper, Utrecht University, 2005).

[898] Paping, 'Parasiteren op het platteland?', 62-3; Formsma et al. (eds.), *Historie van Groningen*, 112.

[899] M. Schroor & O. Knottnerus, 'De opstand 1568-1596' in M. Duijvendak & H. Feenstra (eds.), *Geschiedenis van Groningen*, ii (Zwolle, 2008), 136-7. The transport networks in the Oldambt were improved substantially in the course of the nineteenth century, see M. Clement, *Transport en*

were met with great protest by the people of the Oldambt, but by 1612 the city was connected to the region by the Herendiep (canal). Much of the seventeenth century was marked by bitter battle and revolt of the Oldambt people against the increasing urban influence and sanctions.[900] Farmers were anxious to avoid the demands of *stapelrecht* and tolls on peat and beer. Another problem was that the new dikes which drained the peatlands, ended up building water pressure on an already over-burdened system, and many farmers around Zuidbroek saw their lands flooded.[901] The city tried to invoke jurisdictional rule over the Oldambt through a series of 'quasi-signorial' rights, while the Oldambt farmers looked to ancient precedents as their claims to autonomy.[902]

Groningen finally managed to gain a foothold in the Oldambt from the late seventeenth century onwards, not by direct application of jurisdictions or powers, but by increasing its economic and political stranglehold over other parts of the province, achieved in three ways. First, in some parts of the province, the city began to easily acquire property outside its walls. This was in part aided by the *Reductie van Groningen* in 1594, where a large proportion of confiscated monastic property ended up in city hands, particularly in the fen lands.[903] By 1755, 22 percent of the Ommelanden was in the hands of the urban elite and institutions such as '*gasthuizen*', which increased when urbanites of the Ommelanden acquired properties from the provincial administration between 1764 and 1773.[904] Second was the implementation of the *stapelrecht*, already explained. Third, the city developed an efficient taxation system, falling not just on produce but property.[905] Investment in the expansion of the Veenkolonien allowed them to exploit this avenue,

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economische ontwikkeling. Analyse van de modernisering van het transportsysteem in de provincie Groningen (1800-1914) (Groningen, 1994).

[900] See C. Dijkstra, 'De Oldambten tegen de stad – een vruchteloze strijd', *Groningse Volksalmanak. Historisch Jaarboek voor Groningen* (1974/5), 39-58.

[901] 't Hart, 'Rulers and repertoires', 202.

[902] Dijkstra, 'De oldambten tegen de stad…', 56-8. Invoking historical precedents from Hapsburg rule, see A. de Blécourt, *Oldambt en de Ommelanden: rechtshistorische opstellen met bijlagen* (Assen, 1935), 361. In particular invoking old land rights from 1471 described in H. Feith, 'Geschiedkundig berigt van de vorenstaande oud-Oldambster en Reiderlandsche landregten van 1471 en 1327', *Pro Excolendo Jure Patrio*, 6 (1846), 745-67.

[903] H. Hurenkamp, 'Groningen van stadstaat tot stad van het noorden', in Collenteur et al. (ed.), *Stad en regio*, 45. See also E. Roelfsema, *De klooster en proosdijgoederen in de provincie Groningen* (Groningen, 1928).

[904] Paping, *Voor een handvol stuivers*, 181-5.

[905] M. Muller, *Een economische geschiedenis van Europa vanaf de vroeg middeleeuwen tot omstreeks 1980* (The Hague, 1988), 50-1.

particularly from the seventeenth century onwards.[906] Its profits from the peateries came to be substantial under this intensification of activity.[907] In 1619, the city received all the signorial rights of exploitation in Westerwolde.[908] As well as the benefits of the extraction of peat extraction, the tax on the newly reclaimed land represented four percent of the city's income in 1600.[909] In 1608, the city bought over 100 hectares of peat land from yeoman farmers in the parish of Zuidbroek, and between 1614 and 1628 bought peat lands in Foxhol, Kropswolde, Kolham and Slochteren, so they owned the rights to a wide expanse of fenland stretching across the border between Drenthe and Groningen.[910] New boundaries were drawn between city-owned peat and the peat-lands of local farmers.[911] In sum, Groningen institutions and its administrators were in a good position to finally subject the Oldambt to its influence in the late seventeenth century, mainly down to its huge power that it had built-up over the centuries by exploiting other parts of the province.

Thus, although increased urban influence had not led to any kind of polarisation by the time of the 1721 *verponding*, it laid the foundations for later disparities between rich and poor because first and foremost it gave a favourable institutional context for the perpetuation of the *beklemrecht* lease from the middle of the eighteenth century. Urban institutions and burghers were never going to exploit the lands they owned in the Oldambt themselves (at least not on a wide scale – they did directly exploit some areas), and so their increased influence in the Oldambt made a lease contract like *beklemrecht* more likely. Furthermore, urban institutions and burghers financed the embankment of the polders and the rapid reclamation of new cultivable lands. Small farmers did not see any of the benefits of this new highly fertile land mass, which simply made the larger farmers even more prosperous.

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[906] M. Schroor, 'Een vlucht voorwaarts. Bespiegelingen rond de economisch-geografische politiek van het stadsbestuur van Groningen in het begin van de 17de eeuw', *Historisch Jaarboek Groningen* (2003), 37-58. For the influence of Groningen on the development of this region, see J. Voerman, *Verstedelijking en migratie in het Oost-Groningse veengebied 1800-1940* (Assen, 2001).

[907] Gerding, *Vier eeuwen turfwinning*, 360. The intensification of peat extraction through capital investment was a general process from the sixteenth century in other parts of the Netherlands, not just in Groningen. For example, see S. van der Molen, *Turf uit de Wouden; bijdrage tot de geschiedenis van de hoogveengraverij in oostelijk Friesland tot 1900* (Leeuwarden, 1978).

[908] H. Keuning, *De regio Groningen* (Groningen, 1974), 49.

[909] Schroor, *Stadstaat Groningen,* 46. See also Matthey, 'Op fiscaal kompas', 231.

[910] GA, Losse stukken register Feith, meest charters, 1246-1864, 2241, no. 307; A. de Blécourt, *Het stadsmeierrecht in de Groninger Veenkolonien* (Groningen, 1907), i, v; GA, Archief Veenkantoor, no. 384. Also see Hurenkamp, 'Groningen van stadsstaat', 45.

[911] GA, Losse stukken register Feith, meest charters, 1246-1864, 2241, nos 582, 1151.

C: Inheritance and marriage practices

Inheritance and marriage practices in combination with the *beklemrecht* lease contributed further to the increasing divides between rich and poor from the late eighteenth century onwards. One of the key principles of *beklemrecht* was the stability in the physical farm structures.[912] Since farmhouses were legally bound to pieces of land, not only was their great continuity in the locations of farmhouses (some can be traced all the way from the sixteenth century up to the twentieth century)[913] but the opportunity to build new ones was severely limited. The limited number of farms in the region was a major problem for children looking to inherit property, as quite simply there were not enough properties to go around leading in many cases to downward social mobility – some even being reduced to agricultural labourers.[914] The problems were exacerbated by the unrestricted marriage tactics pursued in the province of Groningen, as it has recently been shown that Groningers often married early in their twenties and almost 10 years earlier than their Drenthe counterparts.[915] Since *beklemrecht* enforced the physical integrity of whole farms, it was not as though farmers could subdivide their lands among their children (even though in theory Groningen was from the sixteenth century a place of partible inheritance practice).[916] Many children in Groningen then were left with nothing, and of course this problem only intensified with the demographic explosion from the mid eighteenth century described below. More and more heirs were finding that their

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[912] H. De Haan & P. Hoppenbrouwers, 'Intergenerational transfer of rural proeprty in the Netherlands. Law, moral code and practice (sixteenth-twentieth centuries)', *Mélanges de l'École Française de Rome. Italie et Méditerranée*, 110.1 (1998), 345.

[913] See some of the impressive reconstructions of farm history over the long term in Groningen. For example, R. Paping, 'Boerderijen en land rond Westerklooster (Kruisweg) vanaf de middeleeuwen tot ca. 1830', *Gruoninga*, 51 (2006), 93-113.

[914] Some of these problems discussed in Paping, 'Gender and the intergenerational transfer of property', 291-313; 'The transfer of farms in north Groningen (the Netherlands), 1591-1991. From selling towards family succession?', in A. Head-Koning & J. Schlumbohm (eds.), *Inheriting practices, marriage strategies and household formation in European rural societies* (Louvain, forthcoming 2012).

[915] E. Karel & R. Paping, 'Searching for a place to live. Succession and child career strategies of peasant and farmer households in rural Drenthe and Groningen in the first half of the nineteenth century' (unpublished paper, Posthumus Conference, University of Antwerp, 2011), 19-20. Also see, *Idem*, 'The rural succession myth. Occupational careers and household formation of peasants' and farmers' offspring around 1800', *Tijdschrift voor Sociale en Economische Geschiedenis,* 4 (2011), 44-75.

[916] Furthermore, it has been shown in many places dominated by different forms of leasehold that farmers rarely entertained the option of subdividing their tenant farm between heirs. See van Bavel, *Manors and markets*, 292.

inheritance actually amounted to nothing, and were going to have to make their own way in an environment hardly conducive to social mobility.

D: Demographic pressure and the labour market

Table 6.4 Population figures for the Oldambt, 1795-1899

	1795	**1830**	**1859**	**1869**	**1879**	**1899**
Population	14898	20302	28051	31132	35059	41383
Population ratio	100	136	188	209	235	278
Houses	n/a	n/a	4744	4695	5465	8345
People per house	n/a	n/a	5.91	6.63	6.42	4.96
Population (Groningen province)	114555	157504	207688	225336	253256	299602
Population ratio (Groningen province)	100	138	181	197	221	262

Sources: CBS, 'Volkstellingen 1795-1971', <http://www.volkstellingen.nl/nl/>.

The seventeenth-century Oldambt experienced prolonged demographic decline, mainly caused by repeated bouts of plague and pestilence.[917] However, from a population nadir in the early eighteenth century, there was a real demographic revival from (roughly) the 1730's onwards. It started slowly as from 1735 to 1760, the population of the Oldambt increased by around 15 percent.[918] The greatest demographic explosion came in the first half of the nineteenth century however, as the number of inhabitants almost doubled between 1795 and 1859. The last decades of the nineteenth century also showed demographic growth, mainly through the expansion of the regional capital, Winschoten, into a small town, but also possibly through the high fertility rate recorded for the region.[919] The Oldambt population in 1899 had increased by a ratio of 2.78 from what it was in 1795, and furthermore, there appears to have been a relentless upward demographic push all the way from 1730 to 1900. Demographic growth in the Oldambt exceeded the general rate for the whole province of Groningen, as noted above.

[917] Although possibly not as severely afflicted as other parts of Groningen. See P. Hoppenbrouwers, 'Demographische Entwicklung und Besitzverhältnisse im Wold-Oldambt (Provinz Groningen) (ca. 1630-1730). Die Quellen und ihre Probleme', in E. Hinrichs & H. van Zon (eds.), *Bevölkerungsgeschichte im Vergleich: Studien zu den Niederlanden und Nordwestdeutschland* (Aurich, 1988), 25.

[918] Knottnerus, 'Land kanaän', 44.

[919] E. Hofstee, 'De ontwikkeling van de huwelijksvruchtbaarheid in het Oldambt in de periode 1880-1950', in *De wereld der mensen. Sociaal-wetenschappelijke opstellen aangeboden aan prof. dr. J.J. Fahrenfort ter gelegenheid van zijn afscheid als hoogleraar in de volkenkunde aan de Universiteit van Amsterdam* (Groningen, 1955), 295-353.

The upward demographic trends from around the middle of the eighteenth century in the Oldambt, worked together with these property constellations to perpetuate economic polarisation by the nineteenth century. As shown already, while the Oldambt in 1721 did not yet show a deep chasm between rich and poor, there had been a trend towards the consolidation of slightly larger farms. Over 60 percent of the total land by this point consisted of enterprises ranging from 11 to 40 hectares. Now many of these farms were too big to be run entirely by family labour, and required the input of outside help. The upward trend in population levels in the Oldambt, likely stimulated in the first instance in the 1730s (slightly earlier than shown for elsewhere in the Groningen clay-regions), played right into the prosperous farmers' hands. The success of the large farms was built upon the efficient market and consistent supply in wage labour. Furthermore, excellent wages attracted seasonal workers from further afield, in particular from the neighbouring Reiderland, but also Westfalen and East Frisia. As the Oldambt became more heavily populated into the nineteenth century, the large farmers benefited from an over-supply in labour, and real wages accordingly dropped.[920] The wages of the nineteenth century did not increase much at all from what they were in the middle of the eighteenth century, but of course prices went up, so much so that by the mid-nineteenth century, labouring families could not even afford to buy bread from their local bakery.[921]

6.6 Why the demographic explosion and settlement expansion, c. 1730-1900?

If upward demographic pressure in combination with particular property configurations had a causal role to play in the widening gap between rich and poor in the Oldambt, the only questions remaining are what started this demographic explosion and why was it maintained over the long term? Surely as conditions reached a critical level in the late nineteenth century, the impoverished would have sought out pastures new? Yet records show few of the emigrants to the Americas from Groningen in the nineteenth century came from the Oldambt, instead more common

[920] However, it must be said that labourer wages in the nineteenth century Oldambt were entirely variable as well. For example, in the 1830's in Midwolda, wages of 4 pennies a day were being paid on some farms, while elsewhere in the 1850's in Termunten, wages of 10 pennies a day were offered. Paping, *Voor een handvol stuivers*, 344.

[921] R. Paping, 'De nijverheid op het Groninger platteland 1800-1860. Bedrijfsstructuur en loonontwikkeling', *Economisch en Sociaal-Historisch Jaarboek*, 54 (1991), 99, 113; G. de Jager, 'De Oldambster landbouwer en zijn bedrijf voor 60 jaar en thans', *Groningen, Cultureel Maandblad*, 10 (1927), 70-3.

was short distance migration between villages in search of work.[922] Settlement decline in the Oldambt was only a twentieth-century phenomenon, exacerbated after the Second World War when the region lost much of its distinctive characteristics.[923]

The explanation offered in this section has two parts: one to explain population rise in the eighteenth and early nineteenth centuries, one to explain continued population rise in the mid to late nineteenth century. First, population increased from (roughly) 1730 up to around the middle of the nineteenth century, due to the excellent opportunities for both permanent inhabitants and seasonal workers to make a living. Work was plentiful, and while larger farmers by the end of the eighteenth century were getting rich off the labour of others, agricultural labourers shared in this collective improvement of living standards.[924] Second, population continued to increase in the second half of the nineteenth century, despite the move towards economic polarisation, due to the possibility for many inhabitants to eek out a meagre living by a combined focus on a number of different economic activities.

During the eighteenth century, farmers were putting more emphasis on arable cultivation and more and more land was being reclaimed from the marshes. Opportunities to work on farms on these new lands were instrumental in the development of new labourer villages clustered on the edges of the Dollard. Work was not just restricted to tilling the fields, but agriculture on the polders necessitated large amounts of labour for digging the dikes and ditches and maintaining the sluices.[925] Fortunately for the labourers, maintenance works were concentrated in the

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[922] R. Paping, 'Family strategies concerning migration and occupations of children in a market-orientated agricultural economy', *The History of the Family*, 9.2 (2004), 159.

[923] For this twentieth century economic and demographic decline, see O. Knottnerus, 'De tragiek van het platteland: herinneringen aan het Oldambt', *Gronings Historisch Jaarboek* (2000), 124-43; 'Het land dat wij gekend hebben... De onstuitbare transformatie van het polderland', in M. Bemelman (ed.), *Alles wordt anders. De transformatie van Nederlands Noorden* (Alphen aan de Rijn, 2001), 11-22; F. Westerman, *De graanrepubliek* (Amsterdam, 1999); J. Elerie & W. Foorthuis (eds.), *Het Oldambt, van verbeelding naar werkelijkheid. Visies op het ruimtelijke toekomstbeeld van het Oldambt* (Groningen, 1993).

[924] Some of the positive interpretations of the general social and economic well-being in the Oldambt in the eighteenth century can be found in an extensive literature, for example, L. Meihuizen, 'Sociaal-economische geschiedenis van Groningerland', in Formsma et al. (eds.), *Historie van Groningen*, 331-60; B. Wander, *Het Oldambtster boerenbedrijf van 1800-1920. Een voorlopige orientatie aan de hand van literatuur* (Arnhem, 1977); O. Knottnerus, 'Oldambt: het Puukje van de geheele provincie', *Jaarverslag Stichting Historisch Boerderij Onderzoek* (1996), 35-55.

[925] Knottnerus, 'Het Oldambt in de achttiende eeuw'.

winter when farm work availability was lower.[926] Figures for the Groningen province show that up to 1850, large farmers were employing more 'in-living' servants and workers on their farms in order to cope with the greater workloads, but also a higher number of fixed contract workers and seasonal or day labourers.[927] Work was seemingly plentiful and reports from the late eighteenth century suggest labourers were known to consistently eat hearty breakfasts of bread, ham, and glasses of beer.[928]

The further we go into the nineteenth century, the less applicable such a positive interpretation becomes. For example, in the Oldambt the notion of a 'fixed contract' worker employed for a year was a bit of misnomer. Although employed on a fixed contract, the availability of work was so polarised between the busy harvest and summer periods and the quiet winter periods that many barely did a week of work in the whole of the winter.[929] Indeed, the levels of winter unemployment on the farms were actually higher in the Oldambt in comparison with the Ommelanden, and the levels of truly fixed contract labourers were lower.[930] The labourer contracts and relations to the farmers was slightly different in the Oldambt to the rest of clay lands, and it was not unusual for labourers who had a long and fixed relationship with a particular farmer to also work on the side for other farmers. Nonetheless, the demand for work was so high on the large farms during the early nineteenth century that many farmers also employed seasonal labourers taken on from the Veenkolonien, Eemsland, Reiderland and other parts of the Westfalen.[931] The continued employment of outsiders became a contested issue in the nineteenth century as a letter was sent in 1846 by 31 labourers from Drieborg to the king himself, requesting

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[926] A point made in van Dam, 'Digging for a dike', 222-4.

[927] G. Collenteur & R. Paping, 'De arbeidsmarkt voor inwonend boerenpersoneel in het Groningse kleigebied 1830-1920', *NEHA- Jaarboek voor Economische, Bedrijfs- en Techniekgeschiedenis*, 60 (1997), 101.

[928] I. van den Bosch, 'Natuur- en geneeskundige verhandeling van de oorzaken, voorbehoeding en geneezing, uit de natuurlijke gesteldheid van het vaderland voortvloeijende', in *Verhandelingen, uitgegeeven door de Hollandsche Maatschappij der Weetenschappen te Haarlem* (Haarlem, 1778), 606.

[929] Paping, *Voor een handvol stuivers*, 102-4.

[930] R. Paping, 'Vaste en losse arbeiders en de werkloosheid op de Groninger klei 1760-1820', *NEHA-Jaarboek voor Economische, Bedrijfs- en Techniekgeschiedenis*, 57 (1994), 153-5; Hofstee, *Het Oldambt,* 217-8.

[931] Lucassen, *Naar de kusten van de Noordzee*, 274; O. Knottnerus, 'Wanderarbeiter auf der andere Seite der Grenze', in P. Schoneville (red.), *Wanderarbeit jenseits der Grenze* (Assen, 1993), 12-21. See also the *Verslag van de commissie, benoemd door het departement Winschoten der Maatschappij tot Nutvan 't Algemeen, betrekkelijk de arbeiders-quaestie* (Winschoten, 1872), 18.

something be done about foreign workers 'taking bread from their mouths'.[932] While the agricultural labourer in 1770 benefited from a high availability in work, good wages, and lower prices for foodstuffs, the world the agricultural labourer knew in 1850 was a lot different. In 1813 around three percent of the Oldambt men over 16 were said to have no work, but by 1859 this had grown to six percent.[933] By the turn of the century terrible economic conditions for many Oldambt people had been translated into political strife.[934] The labourer strikes of 1929 produced numerous tragic stories and violent clashes; the military police shooting dead an impoverished vegetable peddler (a mere onlooker on the riots) one of a number of typical examples.[935] So given this general downturn in economic conditions during the nineteenth century, why did the settlements continue to swell with people?

The answer may lie in the innate flexibility of the Oldambt economy. Impoverished agricultural labourers followed a number of diverse strategies in order to survive. Many of the Oldambt labourers also worked their own plots of land, managing subsistence through a combination of dependent labour and independent cultivation of potatoes.[936] Indeed, the precarious reliance on this crop by a high

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[932] P. Priester & H. de Raad, *De iezeren kette van d'armoude. Aspecten van de sociale-economische geschiedenis van Beerta, 1800-1870* (Groningen, 1983), 28, 138.

[933] GA, Gewestelijke Besturen in Groningen, 1798-1814 (1815), 3, nos. 1898-9, 1901; *Uitkomsten der Vierde Tienjarige Volkstelling in het Koninkrijk der Nederlanden op de een en dertigste December 1859*, i (The Hague, 1863).

[934] The difficulties faced by agricultural labourers were particularly exacerbated at the end of the nineteenth century, ending in political troubles. See P. Hoekman, 'Van spontaan verzet naar socialisme', in P. Hoekman, J. Houkes & O. Knottnerus (ed.), *Een eeuw socialisme en arbeidersbeweging in Groningen 1885-1985* (Groningen, 1986), 31; *Socialisme en arbeidersbeweging in het Oldambt 1881-1894* (Groningen, 1985); L. Buning, 'Sociale beroering in Oostelijk Groningen', *Groningse Volksalmanak* (1979), 125-53; A. Hibma, W. Hoekstra & T. Uil (eds.), *'We hadden geen keus'. Interviews met landarbeidsters uit het Oldambt 1920-1940* (Groningen, 1987); *Verslagen betreffende den oeconomischen toestand der landarbeiders in Nederland*, i (Groningen, 1908), 113-55; J. Frieswijk, *Om een beter leven. Strijd en organisatie van land- en veenarbeiders in het noorden van Nederland (1850-1914)* (Leeuwarden, 1989); G. Voerman (ed.), *Tussen Moskou en Finsterwolde. Over de geschiedenis van van het communisme in Oost-Groningen* (Scheemda, 1993). On the labour strikes of 1929 see O. Knottnerus, 'Boeren en landarbeiders in het Oldambt: de landarbeidersstaking van 1929 en haar voorgeschiedenis', <http://ottoknot.home.xs4all.nl/werk/>; J. Meulenkamp, *'Wie willen boas blieven'. De Oostgroninger landarbeidersstaking van 1929* (Groningen, 1983).

[935] E. Karel, 'Oost-Groningen: een eeuwige periferie?' (unpublished conference paper, Sociaal-Historisch Centrum Limburg te Maastricht, 2012), 4.

[936] The importance of the potato to Groningen discussed in R. Paping & V. Tassenaar, 'The consequences of the potato disease in the Netherlands, 1845-60: a regional approach', in C. O'Grada. R. Paping & E. Vanhaute (eds.), *When the potato failed: causes and effects of the 'last' European subsistence crisis* (Turnhout, 2007), 149-84, esp. 152, 154. Also see F. Terlouw, 'De aardappelziekte in Nederland in 1845

proportion of labourers meant that Groningen was almost the hardest hit province in the Netherlands during the potato disease of the mid nineteenth century, which even led to revolting in the city of Groningen.[937] These small plots were generally what was sold or leased by the larger farmers from their own lands, often whole pieces of fenland onto which the labourers built themselves simple huts and small houses.[938] Farmers realised that their own farms required the stable provision of labour at close hand. The owner of the old aristocratic house known as Ennemaborg in Midwolda leased a plot of one hectare to a labourer from Meerland.[939] Some of the labourers were caught stealing peat from larger holdings.[940]

Thus, the 'labour pool' villages operated through a 'dual economy', whereby the inhabitants would act as agricultural labourers from 6AM to 1 or 2PM in a shortened day, and travel back to their own plots to work on them in the afternoon. As well as having shorter work days, Oldambt labourers held a higher proportion of land themselves than in other parts of Groningen. According to the data taken from the 1832 cadaster, labourers on the newer polders had on average 0.58 hectares for their own use, which is close to Priester's calculation of 0.6 hectares for 1909/10.[941] Compared with Priester's figures for the whole of Groningen, the average landholding of 0.58 hectares for the Oldambt labourers was the highest in the province, (though this amount of land was nowhere near enough to support a family on its own).

Many agricultural labourers supported themselves in the tougher winter periods by securing work in the Veenkolonien, as peat diggers. Some also offered their services as transporters of goods and people along the waterways of the region. Labourers secured some work improving the footpaths by laying down and

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en volgende jaren', *Economisch- en Sociaal-Historisch Jaarboek*, 34 (1971), 263-308; M. Bergman, 'The potato blight in the Netherlands and its social consequences, 1845-47', *International Review of Social History*, 12 (1967), 390-431.

[937] In contrast to erroneous views suggesting the crisis was less in Groningen due to a larger share of freeholders, in J.L. van Zanden, *'Den zedelijk materiëlen toestand der arbeidende bevolking ten platten lande'. Een reeks raporten uit 1851* (Groningen, 1991), 8. For revolts, see D. Gout, 'Het broodoproer in Groningen in 1847', *Groningse Volksalmanak* (1976/7), 63-84.

[938] Georgius & de Smet (eds.), *Honderd jaar Landbouwvereniging*, i, 15; Commissie Fotoboek Nieuw-Scheemda/'t Waar, *Tussen 't Zieldaip en 't Grootmoar: view eeuwen leven en werken in Nieuw-Scheemda en 't Waar* (Nieuw Scheemda, 1985), 24.

[939] GA, NV Ennemaborg te Midwolda, 1660-1964, 402, no. 63.

[940] *Idem*, no. 355.

[941] Own data collected from the GA, Kadaster 1832; Priester, *De economische ontwikkeling*, 160. For 1910 see also *Uitkomsten der telling in zake grondgebruik en veestapel 1910* (The Hague, 1912), 2-11.

compacting gravel.[942] Nonetheless after 1860 labourers began to find it more difficult to secure work, as the farmers made labour cuts in a response to the lowering of prices for agricultural products – a process stimulated by the flooding of the market of cheap grain from the Americas. Less and less labour was needed also with the development of more sophisticated labour-saving machinery and chemical fertilisers.[943] When the agricultural conditions worsened in the second half of the nineteenth century, demographic pressure slowed somewhat compared with the period 1795-1850. However the polder villages continued to swell through extra houses, and this can be seen as the result of the final cultural break between farmer and labourer. The days of the in-living labourer on the large farm were well and truly over, as all labourers began to live independently in their own houses – often in the polder villages. The decline of the in-living servants and maids only exacerbated this trend, and it has been convincingly argued that labourer family strategy by 1850 tended towards keeping the children at home for longer, not moving them out into the service of others.[944]

The very poorest households of the Oldambt were aided in their struggle to survive by the widespread provision of poor relief. During the eighteenth century this support was provided by the parish institutions of the reformed church, although the numbers of Oldambt people who received relief was decidedly limited. The limited gifts had less to do with the workings of poor relief itself, and was more a function of the higher living standards experienced by farmers and labourers alike. As mentioned already, work was still plentiful then, wages were high, and more importantly real wages were high. Poor relief in the eighteenth century did help the really destitute however, and cash payment and food parcels were reserved for widows or families who supported 'burdens' to the household.[945] Through the course of the nineteenth century the nature of this support changed quite a bit according to data from Richard Paping, as more Oldambt inhabitants received welfare, though each gift was a lower

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[942] M. Teenstra (ed.), *Landhuiskundige almanak ten dienste van de land- en buitenman* (Groningen, 1859), 131.

[943] Knottnerus, 'Oldambt: het Puukje'.

[944] R. Paping, 'Family strategies, wage labour, and the family life cycle in the Groningen countryside, c.1850-1910', in P. Kooij & R. Paping (eds.), *Where the twain meet again. New results of the Dutch-Russian project on regional development 1750-1917* (Wageningen, 2004), 147-67; 'Gezinnen en cohorten: arbeidsstrategieen in een marktgericht agrarische economie: de Groningse kleigebieden 1830-1920', in J. Kok, A. Knotter, R. Paping & E. Vanhaute (eds.), *Levensloop en levenslot. Arbeidsstrategieen van gezinnen in de negentiende en twintigste eeuw* (Groningen, 1999), 17-88.

[945] For example, in Midwolda numerous cash and food payments were made in the late eighteenth century to widows, while one Hindrick Jurriens in the same parish received a large yearly payment for keeping his mother in house. See GA, Archief Nederlands Hervormde Gemeente Midwolda, no. 5.

amount. This was testament to the widening disparities in the region between rich and poor, and the increasing numbers of agricultural labourers. Nevertheless, constant distributions of food through parish relief in the likes of Beerta, Finsterwolde, Nieuwschans, Winschoten, Nieuwolda, and Termunten, meant that many households were saved from absolute poverty and starvation in the very worst years.[946]

Furthermore, the Oldambt cannot simply be seen as a diametric opposition between a large group of poor agricultural labourers and a small group of wealthy farmers. In fact, the Oldambt had long known forms of industrial, craft and artisanal employment. In the early seventeenth century we learn that there were at least four bakers and three brewers in the village of Noordbroek, for example.[947] Indeed these sorts of activities may have got an earlier foothold in the Oldambt than other parts of the Ommelanden, because the *stapelrecht* never applied here. By the nineteenth century craft or artisan work was more numerous, as for example, in the same village of Noordbroek there were at least seven bakers in 1866 and 18 in 1900.[948] Quite simply more people required more bread, and taxes on the milling of grain drove up these prices – deeply resented when the potatoes failed and real poverty set in.

The increasing number of industrial and artisanal opportunities in the Oldambt from the second half of the eighteenth century through to the beginning of the twentieth century supported the population and settlement expansion between the rough period of 1730 to 1900. The occupational registers from 1807 suggest that around a fifth of the population were employed in a more permanent industrial or craft capacity, while the conscription registers of 1813 indicate the proportion was more like a quarter. Whether the Oldambt had more industrial opportunities than the rest of the Groningen claylands at this point in time is not clear; certainly in 1807 the proportion of industrial occupations was higher outside of the Oldambt in the 1807 registers, but when comparing the 1813 Oldambt registers with the civil registers for the rest of the clay area from 1811, the Oldambt figures were higher.[949] What we can say at the very least is that industrial, personal service and administrative occupations had an important role to play in the Groningen clay areas in general.

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[946] Paping, *Voor een handvol stuivers*, 289-90.

[947] Abels, *Geschiedenis der doopsgezinden*, 150-3.

[948] G. Last, *Noordbroek: een dorp in de Franse Tijd* (Noordbroek, 1964), 181; H. Antonides, *Noord- en Zuidbroek in vroegere jaren* (Noordbroek, 1973), 254-6.

[949] The Oldambt figures were compared with figures from other parts of the Groningen clay areas recorded in Paping, *Voor een handvol stuivers*, 322-3.

Table 6.5 Occupational distribution of the Oldambt population by parish, 1807 (%)

	Farmer	Labourer	Crafts	Administrative	Other
Beerta	21	42	16	2	20
Finsterwolde	20	43	14	2	21
Midwolda	22	44	16	2	16
Nieuweschans	11	14	35	7	33
Nieuwolda	21	39	15	2	23
Scheemda	18	42	15	3	23
Termunten	19	40	15	4	22
Winschoten	9	28	19	3	41
Oldambt	**17**	**38**	**17**	**3**	**25**
Other parts of the Groningen claylands	24	29	22	4	22

Source: GA, Gewestelijke Besturen in Groningen, 1798-1814 (1815), 3, nos 855-6.

Table 6.6 Occupational distribution of the Oldambt population by parish, 1813 (%)

	Farmers	Labourers	Farm servants	Industry	Service	No work
Beerta	16	20	39	21	4	1
Finsterwolde	12	28	33	14	10	3
Midwolda	13	24	30	26	6	2
Nieuweschans	11	4	15	33	30	7
Nieuwolda	15	20	36	20	8	2
Scheemda	8	23	29	28	8	5
Termunten	11	29	23	26	10	1
Winschoten	3	21	2	34	33	7
Oldambt	**11**	**22**	**27**	**25**	**12**	**3**
Other parts of the Gr. claylands	27	28	5	21	16	3

Sources: GA, Gewestelijke Besturen in Groningen, 1798-1814 (1815), 3, nos 1642-4, 1898-9, 1901.

A problem which always comes up when taking occupational data from censuses is how the assessors came up with the classification system.[950] We have

[950] For a discussion of these sources from 1807, 1811, and 1813, see J.L. van Zanden, *De economische ontwikkeling van de Nederlandse landbouw in de negentiende eeuw, 1800-1914* (Utrecht, 1985), 63-7; 'De volkstelling van 1807/8', in M. Duijghuisen (ed.), *Broncommentaren*, iii (The Hague, 1987), 43-50; 'De Registres Civiques 1811 (1812, 1813)', in M. Duijghuisen (ed.), *Broncommentaren*, iv (The Hague, 1987), 53-8.

limited instructions on the procedures by which the categories were formed.[951] One basic uncertainty is the distinction made between farmers and labourers. We can only assume that farmers were those people who never had to perform labour tasks on other people's farms, while labourers often did so (despite perhaps working small lands of their own). In the 1807 register the biggest uncertainties however, are the administrative and 'other' categories. From what we know about the categories taken from a much later occupational register in 1889, administrative positions probably were reserved for higher status inhabitants with certain amounts of local political power or clerics.[952] Given the absence of a 'service' category, the 'other' classification probably refers to those inhabitants offering an economic service or in personal household service – made more likely by the fact that the regional capital Winschoten had a higher proportion of this type of occupation. In the 1813 registers, the distinction between industry and service-based occupations is a little clearer, although a new category under the heading 'farm servants' is included. It is suggested here that this was a more agricultural type of service, and may have referred to fixed-labourers (even if fixed-labour was more a title and not economic reality, especially in the winter) while the labourer column referred to temporary, unattached labourers.

From the tables, it is clear that by the early nineteenth century, farming was almost an elite activity, and perhaps even more so in the Oldambt than elsewhere in the clay regions since in 1813 only a tenth of the people were classified as farmers in the Oldambt, compared to over a quarter elsewhere. It was apparent by this stage that only a limited number of people were ever going to be farmers, reinforced by the distorted property structures, the inflexible *beklemrecht* contract, and restrictive inheritance practices. A large majority of people in the Oldambt would never be farmers, and had to forge an existence by other means. Given my interpretation of the categories used in the registers, the tables tell two slightly different stories. In the 1807 registers it is suggested that 38 percent of the population of the Oldambt were destined for agricultural labouring, while 45 percent of the population pursued industrial, craft, administrative or service-provision occupations. In the 1813 registers the figures are reversed as almost half the population is involved in agricultural work, while 40 percent are engaged in the industrial or service trades. The second set of figures is more reliable, just for the fact that the greatest

[951] Some instructions to the assessors are provided in GA, Gewestelijke Besturen in Groningen, 1798-1814 (1815), 3, no. 1662.

[952] See *Uitkomsten der beroepstelling in het Koninkrijk der Nederlanden op den een en dertigsten December 1889* (The Hague, 1894).

uncertainty surrounds the interpretation of the 'other' category in 1807 registers.[953] Furthermore, the proportion involved in industrial or service-based occupations (40 percent) matches up more closely with what was going on elsewhere in Groningen province.

Thus, it is clear that even by the early nineteenth century the Oldambt (as with elsewhere in Groningen) was able to absorb a lot of labour not just in tasks linked to the cultivation of the great farms. It was this industrial, service, and craft aspect to the economy which also supported the great population expansion in the Oldambt, and the industrial-service character of the economy was only strengthened by the later stages of the nineteenth century, especially with the growth of Winschoten into a regional trading centre with more urban functions. The province-wide statistics calculated in 1862 suggest this, whereby the total number of those considered 'farmers' or 'agricultural labourers' came to just over half of the Oldambt population. Even accounting for the permanently unemployed, those unable to work, and those with religious or administrative functions, the proportion of people engaged in industrial, craft or service occupations was high at this stage.

Table 6.7 Proportion of the Oldambt population in the agricultural sector, 1862 (%)

	Population	**Agricultural labourers**	**Farmers**	**Agricultural sector**	**Other sectors**
Finsterwolde	2089	45	21	66	34
Beerta	3519	30	24	54	46
Meeden	1412	46	21	67	33
Midwolda	3448	53	17	70	30
Muntendam	2412	14	25	39	61
Nieuweschans	1075	13	11	24	76
Nieuwolda	1627	33	33	66	34
Noordbroek	2145	40	25	65	35
Scheemda	4183	39	19	58	42
Termunten	2690	29	21	50	50
Winschoten	5085	11	9	20	80
Zuidbroek	1905	20	22	42	58
Total	**31590**	**31**	**20**	**51**	**49**

Sources: 'Landbouwstatistiek', in *Bijdragen* (vols 4-5).

[953] The reliability of the figures had also been brought into question in Paping, *Voor een handvol stuivers*, 322.

The settlement of Winschoten in particular in the second half of the nineteenth century began to grow quickly, and the industrial or commercial character of the small town is shown in the 1862 figures, as only one fifth of the inhabitants were considered a farmer or agricultural labourer. In fact the intensification and expansion of grain cultivation on the fertile polders of the Oldambt also created new industrial opportunities. The left-over stalks from the arable fields were used in new cardboard factories.

The first cardboard factory in the Netherlands actually appeared in Hoogezand in 1869 (Hooites and Beukema), and by the beginning of the twentieth century there were around twenty in or around the vicinity of the Oldambt, in particular nine in the village of Oude-Pekela, but also Scheemda, Winschoten, Sappemeer, and Nieuweschans.[954] The factory in Scheemda known as '*De Toekomst*', employed over 60 local labourers in 1909.[955] Some labourers also crossed the border into Germany to work in factories.[956] Women found limited opportunities in the Oldambt by the second half of the nineteenth century, but some sought work as seamstresses or factory workers.[957] Other important factories were those producing starch, making use of surplus potatoes, with particularly significant ones located in Foxhol (*Eureka*), Muntendam, Zuidbroek (*Motké*), and Oude Pekela (*Oranja*) which burnt down in 1898.[958]

A final point to make on the continued swelling of the settlements in the Oldambt during the nineteenth century is that there were minimal 'pull forces' inducing outward migration.[959] Already mentioned is the lack of Oldambt participation in the emigration to the Americas in the second half of the nineteenth century, but it must be emphasized also that the city of Groningen failed to be an

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[954] W. Friedrich, *125 jaar de fabriek. Karton in Nieuweschans* (Nieuweschans, 1995); W. van Hoorn, *'Reiderland', het verhaal van een Coöperatieve strokartonfabriek* (Winschoten, 1968). Also in the Veenkolonien, see T. Broekhuis, *Voorheen de vooruitgang. Voormalige aardappelmeel- en strokartonfabrieken in de Veenkolonien* (Amsterdam, 1986).

[955] RAG, Coöperatieve strokartonfabriek 'De Toekomst', 1899-1971, 388, nos 160, 166. See also the wage books of the '*Reiderland*' cardboard factory in GA, Coöperatieve strokartonfabriek 'Reiderland', 1913-1988, 2045, no. 122. Furthermore, see the numerous labourers employed in other factories, for example GA, W.A. Scholten NV, ca 1840- ca 1965', 1100, nos. 56, 106, 110, 171, 176, 190, 199, 203, 206, 208.

[956] GA, W.A. Scholten NV, ca 1840- ca 1965', 1100, nos. 215-6.

[957] Hibma et al. (eds.), *'We hadden geen keus'*, 12-5; *Verslagen betreffende den oeconomischen toestand der landarbeiders*, i, 105, 153.

[958] Voerman, *Verstedelijking*, 49.

[959] On the importance of 'pull' factors for migration patterns see, for example, J. Stewart, 'Economic opportunity or hardship? The causes of geographic mobility on the agricultural frontier, 1860-1880', *Journal of Economic History*, 69.1 (2009), 239.

attractive option during this period. Groningen failed to absorb labour from the countryside.[960] During the first half of the nineteenth century this is perhaps to be expected given that agriculture was still going through an intensifying and expansion process in the clay areas, and work was still being created in the countryside (even if it was seasonal). An important observation must be, however, that the Netherlands in general during the nineteenth century was going through a retarded or slower urbanising process in comparison with other areas of Europe.[961] Indeed it has long been remarked that the Netherlands retained a certain agricultural character during the nineteenth century, strangely at odds with its early commercialisation of the sixteenth and seventeenth centuries.[962] The Netherlands was slow to latch onto urbanisation connected with the Industrial Revolution from the late eighteenth century. It is in this final context that we can understand the lack of drive for Oldambtster agricultural labourers to seek their fortune in the city of Groningen in the 1800's.

Thus, in sum, economic polarisation and the marginalisation of a wide section of the population often has been linked with demographic and settlement contraction and even collapse, as impoverished groups sought their fortunes elsewhere. The effects of economic polarisation in the Oldambt, however, were negated by the flexible and adaptable 'sub-economy' which was operated by agricultural labourers and traders simultaneous to the dominant grain-based commercial farming enterprises of the big farmers. Poor households were able to eek out a precarious living, which taken together with the expansion of regional centres like Winschoten and the lack of a pull from the big cities like Groningen, allowed population and settlement to expand well into the twentieth century. Of course, the simultaneous existence of extreme polarisation, widespread poverty, and demographic growth could not last, and it could be said that the flexible labourer economy merely put off and delayed the inevitable – a serious retraction in habitation. The second half of the

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[960] The same process has for example been plotted for Zeeland in P. Brusse, *Gevallen stad. Stedelijke netwerken en het platteland. Zeeland 1750-1850* (Wageningen, 2011).

[961] See for example J. de Vries, 'Dutch economic growth in comparative-historical perspective, 1500-2000', *De Economist*, 148 (2000), 443-67; P. Brusse & W. Mijnhardt, *Towards a new template for Dutch history. De-urbanization and the balance between city and countryside* (Utrecht, 2011).

[962] On the early Dutch modernisation see de Vries & van der Woude, *The first modern economy*. On early Dutch urbanisation, see J. de Vries, *European urbanization* (London, 1984), 65. On the slow loss of position in comparison with other countries in the nineteenth century with regard to a per capita income see A. Maddison, *Dynamic forces in capitalist development* (Oxford, 1991), 7; J. Smits, E. Horlings & J.L. van Zanden, 'Sprekende cijfers! De historische nationale rekeningen van Nederland, 1807-1913', *NEHA- Jaarboek voor Economische, Bedrijfs- en Technieksgeschiedenis*, 62 (1999), 51-110.

twentieth century up the present day therefore has predominantly been a story of crisis, epitomised by the interrelated problems of high youth unemployment and the so-called 'brain-drain' (outward migration of educated people towards the Western Netherlands), which has pushed the Oldambt and East-Groningen in general to the cultural and economic periphery.[963] In a desperate attempt to halt the decline, the artificial flooding of the farmlands and the construction of the housing project known as the 'Blauwe Stad' aims to rejuvenate the region, though without commercial or industrial development alongside it, it remains unclear who would choose or be able to live in the Oldambt.[964]

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[963] W. Blauw & H. Kuipers, *Van de paal gerukt? Jongeren aan de rand van de Oost-Groninger samenleving* (Groningen, 1981); H. Doornbos, *'...en er is slechts een handvol overgebleven'. De teloorgang van middenstand, handel en ambacht in Wagenborgen* (Wagenborgen, 1997); H. Veld-Langenveld, *De weg naar het Westen. Migratiemotieven en migratiebeleid* (Assen, 1957); J. Boertjens, 'Het Oldambt, beperkingen en kansen', in Elerie & Hoppenbrouwers (eds.), *Het Oldambt*, 153-60; G. Beukeuma, 'Een nieuwe toekomst voor het Oldambt', in Elerie & Hoppenbrouwers (eds.), *Het Oldambt*, 171-8.

[964] See on the Blauwe Stad, J. Kleine, 'Het Oldambt: de Blauwe Stad als laatste redmiddel?', *Bevolking en Gezin* (1997), 69-78; Provincie Groningen, *Van idee naar werkelijkheid. Eindrapport van de Stichting Blauw Stad* (Groningen, 1997); *Gebiedsvisie Schiereiland van Winschoten. Een visie vanuit natuur en landschap op de ontwikkeling van het stadslandschap De Blauwe Stad* (Groningen, 1998); K. van der Meer, *Urban design: Blauwe Stad* (Groningen, 2003). On the problems facing the project, se Provincie Groningen, *Trots en nieuwsgierig. Toekomstperspectieven voor de Blauwe Stad en het Oldambt* (Groningen, 2010).

Chapter 7
Reconsidering the Mediterranean 'agro-town' model and escaping a vision of an 'unchanging' Italian South

"What do people do here? I once asked at a little town between Rome and Naples; and the man with whom I talked, shrugging his shoulders, answered curtly, 'c'e miseria', there's nothing but poverty… I have seen poverty enough, and squalid conditions of life, but the most ugly and repulsive collection of houses I ever came upon was the town of Squillace".

George Gissing, *By the Ionian Sea*

George Gissing's 'rambles' through Southern Italy at the turn of the twentieth century led him to remark extensively on the topography.[965] In particular, he frequently mentioned the miserable living conditions of the people he encountered; who tended to live huddled together in large impoverished towns. His account is made all the more interesting by the fact that (a) Southern Italy is still today far poorer than Northern Italy, and furthermore, includes some of the poorest regions in Western Europe, and (b) this habitation pattern within large towns has been retained in large parts of modern Southern Italy. This settlement structure, often melancholically depicted as grim and bleak, dominates much of the Mediterranean landscape today. These large agglomerated settlements are often referred to as 'agro-towns', and while many in the second half of the twentieth century came to incorporate a more commercial character, a large proportion still retain an essentially agricultural function. In fact, Mediterranean agro-towns have been linked with seven characteristic features.

1. Large populations of agricultural wage labourers[966] are densely packed into the town, while the surrounding countryside is largely deserted of habitation.[967] Agricultural labourers can walk great distances to work the fields.[968]
2. The towns support grain-focused cultivation exploited through a series of large estates (*latifundia*) with minimal capital investment.
3. The inhabitants exhibit a culturally ingrained distaste for the countryside, and instead exalt the virtues of town life.[969]

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[965] The quote above is taken from G. Gissing, *By the Ionian Sea: notes of a ramble in Southern Italy* (Teddington, 2007 [1901]), 65.

[966] High levels of wage labour also a characteristic feature. See R. Domínguez, 'Desigualdades sociales y crecimento económico regional en Espana a largo plazo', *Revista de Historia Industrial*, 22 (2002), 177-93.

[967] B. Salvemini, 'Prima della Puglia. Terra di Bari e il sistema regionale in età moderna', in P. Villani & F. Macry (eds.), *Storia d'Italia. Le regioni dall'Unità ad oggi. La Puglia* (Turin, 1989), 120; G. Labrot, 'La città meridionale', in G. Galasso & R. Romeo (eds.), *Storia del Mezzogiorno*, viii (Rome, 1984), 221.

[968] A. Serpieri, *La struttura sociale dell'agricoltura italiana* (Rome, 1949), 280; R. Rochefort, *Le travail en Sicile. Étude de géographie sociale* (Paris, 1961), 166.

[969] See, for example, A. Blok & H. Driessen, 'Mediterranean agro-towns as a form of cultural dominance; with special reference to Sicily and Andalusia', *Ethnologia Europaea,* 14 (1984), 111-24; J. Schneider & P. Schneider, *Culture and political economy in western Sicily* (New York, 1976), 66, 151; S. Silverman, *The three bells of civilization: the life of an Italian hill town* (New York, 1975); J. Davis, *The people of the Mediterranean: an essay in comparative social anthropology* (London, 1977); M. Kenny & D. Kertzer (eds.), *Urban life in Mediterranean Europe* (Chicago, 1983); H. Driessen, 'Male sociability and

4. The inhabitants have high levels of local patriotism and identification with their town of origin.[970]
5. The towns lack urban functions or municipal institutions[971] (where the people have no concept of 'citizenship' or civic traditions),[972] lack a commercial or industrial character, and have no jurisdictional control or autonomy over the rural hinterlands (in the sense of a *contado*).[973]
6. The towns (certainly of the twentieth century) are home to hostile entrenched class attitudes between landowners and labourers.[974]
7. The towns have unpredictable and constantly fluctuating populations (can grow and decline really rapidly), as a result of the insecure and temporary nature of available agricultural work.[975]

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rituals of masculinity in rural Andalusia', *Anthropological Quarterly*, 56.3 (1983), 125 Also in Africa, see K. Kooijman, *Social and economic change in a Tswana village* (Leiden, 1978), 65.

[970] As seen in D. Gilmore, *The people of the plain. Class and community in lower Andalusia* (New York, 1980). By the same token, it has been suggested that inhabitants of Mediterranean agro-towns have animosity towards other agro-towns (closed character); for example in C. Chapmann, *Millocca: a Sicilian village* (Cambridge, 1971), 150; R. Behar, *Santa María del Monte: the presence of the past in a Spanish village* (Princeton, 1986); S. Freeman, 'Corporate village organization in the Sierra Ministra: an Iberian structural type', *Man*, 3 (1968), 477-87; M. Herzfeld, *The poetics of manhood: contest and identity in a Cretan mountain village* (Princeton, 1985); P. Loizos, *The Greek gift: politics in a Cypriot village* (Oxford, 1975), 94-5.

[971] S. Silverman, 'Agricultural organization, social structure, and values in Italy: amoral familism reconsidered', *American Anthropologist*, 70..1 (1968), 1-20.

[972] A thesis famously put forward by R. Putnam, *Making democracy work: civic traditions in modern Italy* (Princeton, 1993).

[973] A. Musi, 'Piccole e medie città nella storia moderna del Mezzogiorno continentale', *Rassegna Storica Salernitana*, 10 (1994), 156-7; C. Vivanti, 'Città e campagne', in R. Romano ed., *Storia dell economica italiana. L'età moderna: verso la crisi*, ii (Turin, 1991), 267-70; M. Berengo, 'Città e 'contado' in Italia dal XV al XVIII secolo', *Storia dell Città*, 36 (1986), 107; G. Galasso, 'Gli insediamenti e il territorio', in *L'altra Europa. Per un'antropologia storica del Mezzogiorno d'Italia* (Milan, 1982), 58; E. Di Ciommo, 'Piccole e medie città meridionali tra antico regime e periodo napoleonico', in *Villes et territoire pendant la période napoléonienne (France et Italie)* (Rome, 1987), 357. Although there is now some literature on the Southern Italian town and its hinterland; for example, A. Spagnoletti, *L'inconstanza delle umane cose'. Il patriziato di Terra di Bari fra egemonia e crisi* (Bari, 1981); G. Delille, 'Migrations internes et mobilité sociale dans la Royaume de Naples (Xve-XIXe siècles)', in P. Macry & A. Massafra (eds.), *Fra storia e storiografia. Scritti in onore di Pasquale Villani* (Bologna, 1994), 559-70.

[974] D. Gilmore, 'Class, culture, and community size in Spain: the relevance of models', *Anthropological Quarterly*, 49.2 (1976), 100; T. Greaves, 'The Andean rural proletarians', *Anthropological Quarterly*, 45.2 (1972), 65-83; S. Mintz, 'The folk-urban continuum and the rural proletarian community', *American Journal of Sociology*, 59 (1953), 136-43; J. Caro Baroja, 'The city and the country: reflections on some ancient commonplaces', in J. Pitt-Rivers (ed.), *Mediterranean countrymen: essays in the social anthropology of the Mediterranean* (Paris, 1963), 38.

The prevalence and persistence of agro-towns across the Mediterranean is curious, but as yet is not well explained in the literature. This is unfortunate, because understanding the roots behind the agro-town structure may shed some new light on the so-called economic underdevelopment in Southern Italy and Southern Spain, especially given an explicit link has often been made between these grim towns and poverty.[976] It may, furthermore, explain the precarious demographic situation of the twentieth century in Italy, which led to a mass exodus of the poor from the South to the North in search of employment. The aim of this chapter is to examine the causes behind the perpetuation of this characteristic Mediterranean settlement development (which supported in the main, a large proportion of vulnerable inhabitants), by focusing explicitly on parts of Apulia in Southern Italy.

Early work on agro-towns saw their formation as a logical grouping together of people in what was an essentially harsh environment including poor access to water, the threat of malaria, and widespread lawlessness and perpetual insecurity.[977] These arguments were not convincing at all. Many of these same conditions are found all over the world even today, in places not necessarily characterised by agro-towns. Later scholars added some sophistication to these environmentally deterministic interpretations, however, and the current consensus seems to be that agro-towns are somehow linked to specific social and economic conditions such as polarised distribution of property, large estate agriculture (*latifundia*), and large surpluses of labour (perhaps with widespread unemployment).[978] Indeed, unequal land

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[975] G. Djurfeldt, 'Classes as clients of the state: landlords and labourers in Andalusia', *Comparative Studies in Society & History*, 35.1 (1993), 174-5.

[976] An explicit link made in, for example, J. Boissevain, 'Poverty and politics in a Sicilian agro-town: a preliminary report', *International Archives of Ethnography*, 50 (1966), 198-236. On the regional divergence between South and North, see a study on Spain in R. Domíinguez, *La riqueza de las regiones: las desigualdades económicas regionales en Espana, 1700-2000* (Madrid, 2002).

[977] E. Semple, *The geography of a Mediterranean region. Its relation to ancient history* (London, 1932), 539-40; H. Ahlmann, 'Etudes de géographie humaine sur l'Italie subtropicale. Calabre, Basilicate et Apulie', *Geografiska Annaler*, 8 (1926), 113-5; G. Kish, 'The marine of Calabria', *The Geographical Review*, 43 (1953), 496; F. Compagna, *La questione meridionale* (Milan, 1963), 78; C. Maranelli, *Considerazioni geografiche sulla questione meridionale* (Bari, 1946), 26-8; C. Colamonico, 'La distribuzione della popolazione nella Puglia central e meridionale secondo la natura geologica', *Bolletino Reale della Società Geografica*, 5 (1916), 201-34, 274-305, 403-29; M. Weber, *The city* (New York, 1962), 82; L. Unger, 'Rural settlement in Campania', *The Geographical Review* **43**, 4 (1953), 506; P. Schneider, 'Coalition formation and colonialism in western Sicily', *Archives Européennes de Sociologie*, 13.2 (1972), 257.

[978] A. Blok, 'South Italian agro-towns', *Comparative Studies in Society & History*, 11.2 (1969), 121-35; F. Snowden, *Violence and great estates in the south of Italy: Apulia. 1900-1922* (Cambridge, 1986); T.

distribution has long been associated with the Mediterranean (particularly in Southern Italy), continuing into the twentieth century and revealed by the (largely failed) attempts at land reform.[979]

Although there is some logic to the association of agro-towns and economic polarisation, a causal link between the two is unclear. Research into these agro-towns has been hindered by a number of traditions. First, one of the problems is that the literature is rarely historically rigorous. Indeed, much interest in the subject has fallen within the domain of ethnographers or anthropologists, more interested in the so-called 'Mediterranean mindset' or imbedded cultural values. The long-term processes which led to the appearance of the agro-towns have rarely been considered.[980] In fact, from the literature we cannot easily discern whether agro-towns are a recent phenomenon, only emerged within the past couple of centuries, or have medieval or even ancient antecedents.[981] There needs to be a more explicit focus on chronology. A second reason for this unclear development over time may be the fact that the history of Southern Italy and the Kingdom of Naples has often been dominated by this perception of unchanging feudal structures. There is almost a sort of perception that there is no need to look at the development of agro-towns because Southern Italy was throughout the pre-industrial period mired in antiquated feudal relations which left no room for dynamic changes in the social structure.

Furthermore, the literature on the agro-towns (with the notable exception of Arlacchi) tends to examine them in isolation. Yet the *Mezzogiorno* (southern Italy)

Tentori, 'Social classes and family in a southern Italian town: Matera', in J. Perstiniany (ed.), *Mediterranean family structures* (Cambridge, 1976), 273-85; D. Mack Smith, 'The latifundia in modern Sicilian history', *Proceedings of the British Academy*, 51 (1965), 87-93; M. Rossi-Doria, 'The land tenure system and class in southern Italy', *American Historical Review*, 64 (1958), 46-53; R. King & A. Strachan, 'Sicilian agro-towns', *Erdkunde*, 32 (1978), 111-23; H. Mørch, 'Rural landscapes in Puglia – on the functional relationship between agriculture and natural resources', *Geografisk Tidsskrift*, 87 (1987), 36-41.

[979] A. Blok, 'Land reform in a west Sicilian Latifondo village: the persistence of a feudal structure', *Anthropological Quarterly*, 39 (1966), 1-16; R. Dickinson, 'Land reform in southern Italy', *Economic Geography* (1954), 157-76.

[980] Even the best work on Southern Italy which has identified many different 'types' of Mezzogiorno fails to go back much before 1860; for example, see the otherwise excellent P. Arlacchi, *Mafia, peasants, and great estates: society in traditional Calabria* (Cambridge, 1983). There are cases where historical sources are not employed at all, for example, in J. Broegger, *Montevarese: a study of peasant society and culture in southern Italy* (Oslo, 1971).

[981] Very rarely does the literature on agro-towns adequately mention the chronology. The eighteenth and nineteenth centuries have been cited as important formative periods in N. Antonacci, 'Le città rurali nell'Italia meridionale nel XIX e XX secolo. Rassegna critica e prospettive di ricerca', *Società e Storia*, 71 (1996), 109-31.

has some landscapes which do not conform to the agro-town model.[982] Thus, perhaps a greater understanding of the proliferation of large agricultural towns in the Mediterranean may be sought by employing a comparative approach? What was present in the agro-town areas, which was absent in the small areas where the concentrated town structure did not develop? In this chapter, using this approach, an Apulian agro-town typical of southern Italy (Ascoli Satriano) is contrasted with an area of highly dispersed settlement in another part of Apulia (Locorotondo). The scattered conical stone *trulli* of Locorotondo are a curious aberration from the general pattern of large concentrated towns in Apulia and southern Italy in general.[983]

Thus, in this chapter, the inconsistencies in the literature are addressed in order to gain some new light into the perpetuation and proliferation of the agro-town model across the Mediterranean. First, some of the basic conditions which have been associated with agro-towns in the literature are reexamined. This section is split into two parts: first we explore the relationship between agro-towns and economic polarisation, and second we look more closely at the link between agro-towns and grain-based monocultures, large estate agriculture (*latifundia*), and labour-intensive capital-extensive modes of exploitation. After this section, it is argued that the link between agro-towns and economic polarisation is a convincing one; however, the link between *latifundia* and agro-towns is much more dubious. In the second half of the chapter, some thought is given to (a) the causal relationship between the polarised distribution of property and the proliferation of agro-towns, and (b) why polarisation was so endemic and established itself over the long term in the Italian South. In the concluding remarks, it is noted that while polarisation and inequality may have been indicative of an unchanging and conservative Italian South, actually these continuous structures sometimes got their durability through dynamic responses to changing conditions by dominant interest groups in the short-term.

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[982] See R. Dickinson, 'Dispersed settlement in southern Italy', *Erdekunde*, 10 (1956), 282-97; Arlacchi, *Mafia*; Broegger, *Montevarese*.

[983] On the built structure of the *trullo,* see C. Giorgi & P. Speciale, *La cultura del trullo: antologia di scritti letterari e scientifici sui trulli* (Fasano, 1988). For the distribution of *trulli* in the Murgia region, see E. Wirth, 'Die Murgia dei Trulli', *Die Erde*, 93 (1962), 249-78; B. Spano, *Insediamenti e dimore rurale in Puglia centro-meridionale* (Pisa, 1968).

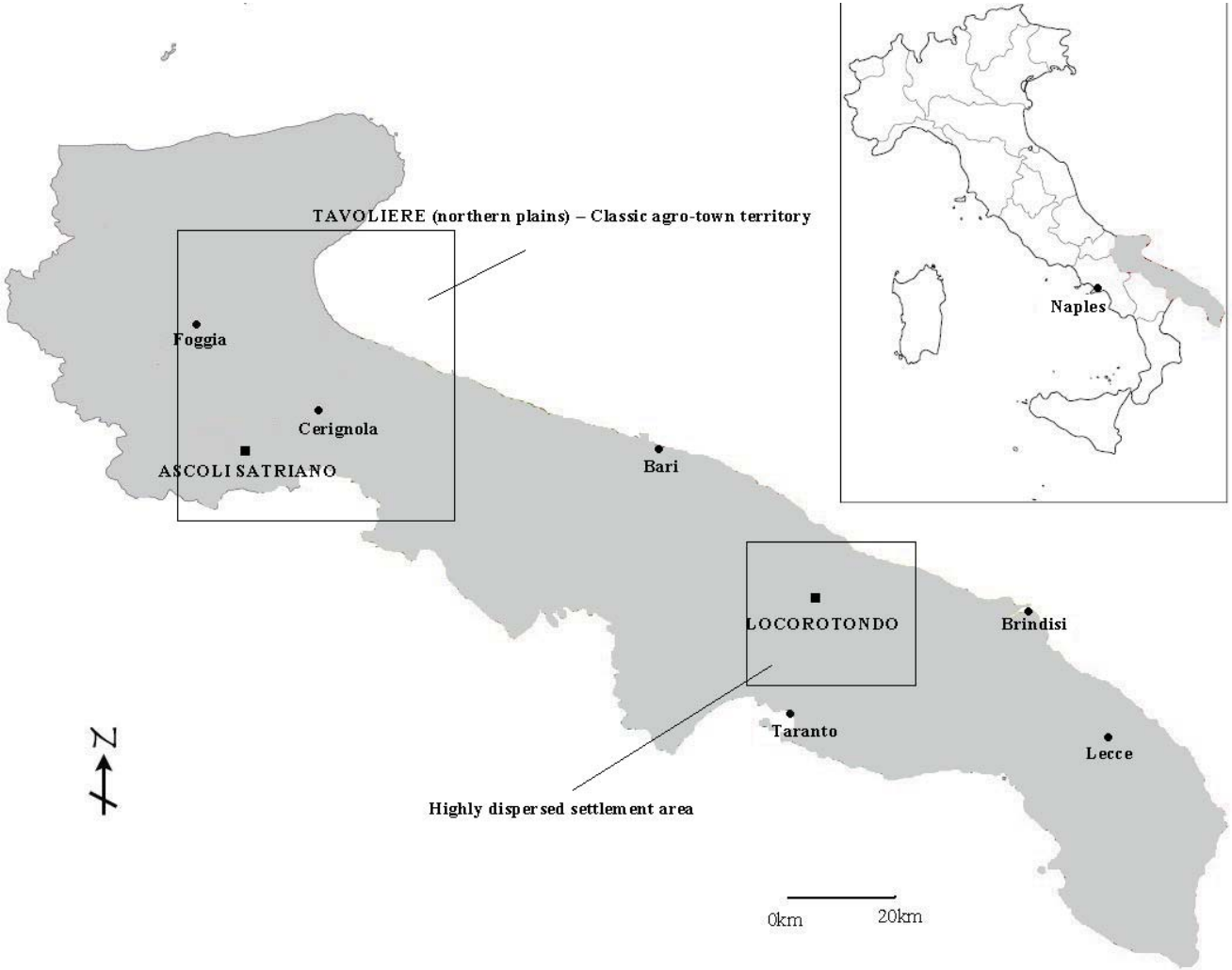

Figure 7.1 Map of Apulia

7.1 Re-thinking the persistence of agro-towns

A: Agro-towns and economic polarisation

In the literature, a link has been suggested between high levels of inequality in the Mediterranean and the perpetuation of the agro-town model. However, this link has rarely been tested systematically. In this section, a comparative approach is taken to further explore this relationship. One thing the literature on agro-towns certainly does not do (with the notable exception of Arlacchi), is appreciate the diversity of settlement structures in Southern Italy. Agro-towns may dominate the landscapes, yet there are many areas which do not conform to the agro-town model.[984] With this in mind, a simple question we can ask is whether the areas which did not conform to the typical pattern of agro-towns were less economically polarised than those agro-town areas. In reference to the social and economic development of the Mediterranean, noted anthropologist John Davis has noted the absence of 'a single study which says resources are more equally distributed in this society than in that, still less one that draws out the consequences'.[985]

By taking some comparative examples from across the Mediterranean, it is clear that those 'exceptional' areas that support small village or dispersed settlement patterns are generally more equitable than those areas characterised by the agro-town. The Gini-coefficients for the distribution of land in the agro-town areas are much higher, suggestive of higher polarisation. From the table below, a basic connection between polarisation and agro-towns is confirmed. The agro-town areas in the table had on average a Gini-index of 82 percent, while the non-agro-town areas came to 58 percent. The levels of polarisation were probably even higher than the figures suggest in the agro-town areas, given that most of the figures come after the mid-twentieth century land reforms.

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[984] See Dickinson, 'Dispersed settlement in southern Italy'; Arlacchi, *Mafia*; Broegger, *Montevarese*; A. Galt, *Far from the church bells: settlement and society in an Apulian town* (Cambridge, 1991).

[985] Davis, *People of the Mediterranean*, 88.

Table 7.1 Gini-coefficients for various places in the Mediterranean, twentieth century

Place	Region	Agro town or not	Gini-coefficient	Year
(Genuardo)	Sicily	Agro-town	88	Pre-1966
Trapani	Sicily	Agro-town	76	1947
Pisticci	Basilicata	Agro-town[986]	81	1972
Alcala	Andalucia	Agro-town	87	1970
Vila Velha	Castelo Branco	Agro-town	75	1970
Sicily Province[987]	Sicily	Agro-town (mostly)	82	1947
Conversano	Apulia	Not	57	1972
Locorotondo	Apulia	Not	55	1972
Pantelleria	Sicily	Not[988]	52	1947
Alberobello	Apulia	Not	63	1972
Castellana Grotte	Apulia	Not	64	1972
Cisternino	Apulia	Not	52	1972
Monopoli	Apulia	Not	65	1972
Zumpano	Calabria	Not	59	1972

Sources: Galt, *Far from the church bells*, 28-9; Blok, *The mafia of a Sicilian village*, 251; INEA, *La distribuzione della proprietà fondiaria in Italia* (Rome, 1947); ISTAT, *Secondo censimento generale dell'agricoltura, 25 ottobre 1970* (Rome, 1972); Davis, *People of the Mediterranean*, table 6; A. Galt, 'Social stratification on Pantelleria, Italy', *Ethnology*, 19.4 (1980), 410.

However, as mentioned already, one of the problems with the previous approaches to agro-towns is that the research has not been historically rigorous. We have plenty of data from the twentieth century on land distribution, but the point is that agro-towns did not suddenly appear in the twentieth century. Furthermore, the polarisation of resources was not a modern phenomenon – it probably had existed over a long period. Unfortunately given the paucity of sources and the lack of attention devoted to this subject, reconstructing the chronological development of agro-towns and the distribution of resources is difficult. However, some light is shed on this issue by my own more detailed comparative case study performed on two

[986] On this settlement pattern, see J. Davis, 'Town and country', *Anthropological Quarterly*, 42.3 (1969), 171-85.

[987] Whole province included because most of Sicily conforms to a concentrated town model (with some limited exceptions).

[988] On the island's settlement structure, see A. Galt, 'Exploring the cultural ecology of field fragmentation and scattering on the island of Pantelleria', *Journal of Anthropological Research*, 35.1 (1979), 93-108.

regions in Apulia (Ascoli Satriano and Locorotondo) in Southern Italy (located on the map below).

The divergence between those agro-town areas with more polarised distribution of landownership and those areas without agro-towns with more egalitarian distribution of landownership went much further back than the twentieth century. Indeed, Ascoli Satriano, situated on the northern plains of Apulia (the Tavoliere) alongside other similar large concentrated towns, certainly was characterised by extreme economic polarisation in the eighteenth century. The Catasto Onciario (a fiscal survey of property in the Kingdom of Naples) of 1753 recorded an astonishing 97 percent on the Gini-index for distribution of land.[989] One percent of the households listed held claim to 58 percent of the resources. Furthermore, 93 percent of the land was in the hands of feudal lords such as the Duke of Ascoli, lesser aristocratic families, or absentee ecclesiastical institutions. Three-quarters of the population had no access to land at all; a phenomenal amount when one considers that in another well-known area of economic polarisation (the plains of Campania to the north of Naples), the proportion of inhabitants of Crispano who had no land came to just over 55 percent.[990] In fact, most of the Ascoli residents did not even own houses, often renting a room from ecclesiastical institutions or wealthy aristocrats who monopolised the real estate in the town. In Ascoli only a quarter of the population owned their houses, which contrasted with a place like Zumpano (a small village in a part of Calabria not conforming to the agro-town model) where two-thirds of the population owned their own houses.[991]

In contrast to the concentrated towns on the north Apulian plains, Locorotondo does not conform to the agro-town structure, instead representing an entirely scattered network of conical stone houses (known as *trulli*) where over half the population live out of the town and in the fields.[992] Locorotondo and the areas around it did not have such a disparity in the distribution of land in the eighteenth century. In Locorotondo, well over half of the land was in the hands of local traders, artisans, and farmers. The nobility held just 15 percent of the land, most of which was in the hands of the feudal lord of Locorotondo, the Duke of Martina Franca.[993] The Gini-index was much lower than Ascoli – around 77 percent. By the eighteenth

[989] Calculation taken from a database of A. Ventura ed., *Onciaro della città di Ascoli 1753* (Foggia, 2006).

[990] ASN, Catasti Onciari, vols 44-50.

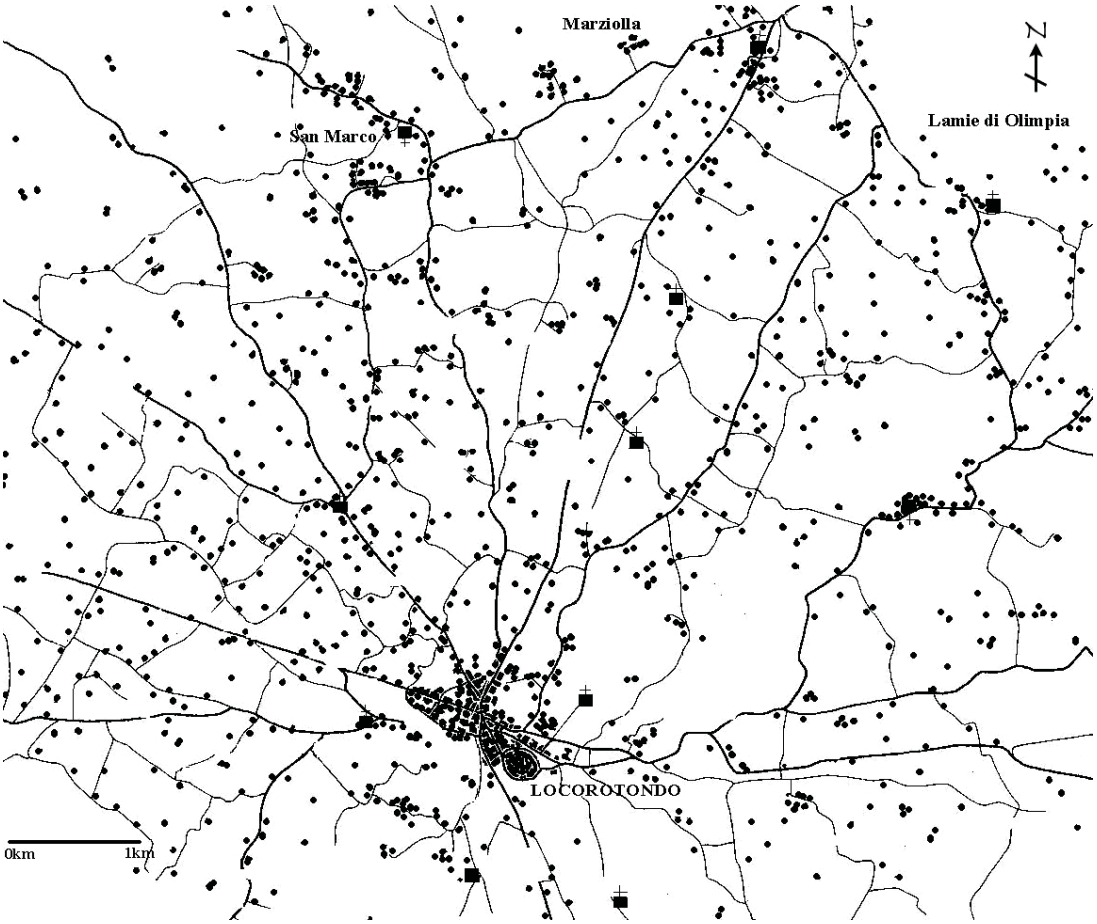
[991] ASC, Onciario con collettiva e tassa del Comune di Zumpano, no. 732.

[992] A. Liuzzi, *La Murgia dei Trulli: lineamenti caratteristiche, sviluppo economico e civile* (Martina Franca, 1981), 150.

[993] ASB, 1749 Catasto Onciario di Locorotondo.

century, Ascoli and Locorotondo, separated by a number of kilometres, were worlds apart.

Figure 7.2 Distribution of dispersed *trulli* in Locorotondo, end of twentieth century



So it is confirmed that Ascoli Satriano was far more economically polarised than Locorotondo by the eighteenth century (and perhaps earlier than that), however; how do we know whether Ascoli was a concentrated town and Locorotondo a dispersed settlement by this point? The Kingdom of Naples was decimated by pestilence and plague in the mid seventeenth century, which reduced population right across the board.[994] Ascoli constituted a rough population of around 4350 in 1648,[995] but after the plagues, it lost more than half of its inhabitants.[996] After that

[994] For the overall Kingdom of Naples figures, see J. Marino, *Pastoral economics in the Kingdom of Naples* (Baltimore, 1988), 65-6.

[995] L. Giustiniani (ed.), *Dizionario geografico ragionato del Regno di Napoli di Lorenzo Giustiniani*, ii (Naples, 1797), 8-9, 282.

[996] The proportion of survivors was suggested as just one-sixth of the former population in a later chronicle, although this may have been exaggerated. See L. Todisco Grande, 'Memoria dell'antichità del

shock, Ascoli (like other Apulian towns) showed demographic growth – and grew into the town structure that we know today. By 1753, it had surpassed the number of houses recorded in 1648, and nearly every house was recorded within the town centre or a *contrada* just outside the walls.[997] The only houses a long way from the walls were the large farms (*masserie*) belonging to elite landowners, whose locations can be plotted through a series of excellent maps produced in the seventeenth and eighteenth centuries by the Royal Customhouse of Naples.[998] Many of these *masserie* were located in exactly the same spots as former Roman *fattorie* and villas, or failed villages from the late Middle Ages).[999] A nice visual illustration of the fact that Ascoli had already grown into a concentrated town structure however, is shown through a sketch produced at the beginning of the eighteenth century.

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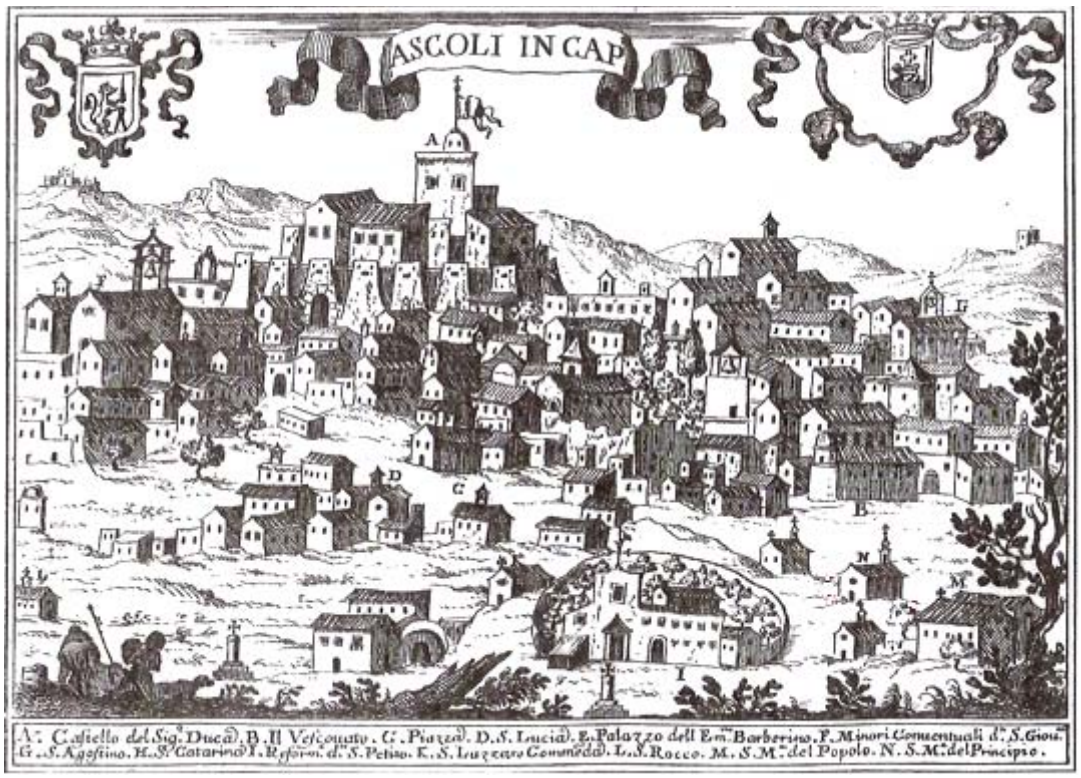
sito del governo di Ascoli Satriano', in A. Silba (ed.), *Frammenti di storia nella città dei tre colli: Ascoli Satriano in tre antiche documenti* (Ascoli Satriano, 2007), 131.

[997] Despite the obvious concentrated structure of the town, the Onciario probably did conceal a level of settlement in the countryside not systematically recorded by the assessors. See N. Colclough, 'Famiglie catastali – la dinamica delle relazioni di parentela e dell'organizzazione familiare nella Ascoli dell'ancien régime', in Ventura (ed.), *Onciario 1753*, 53.

[998] For example, the *masseria* of the 'Magnificent' Potito Romani in the Locazione di S. Giuliano. ASFO, Dogana delle Pecore di Foggia, no. 20. Also see P. Di Cicco, *Il Tavoliere di Puglia nella prima metà del XIX secolo* (Foggia, 1966), 199-209.

[999] R. Licinio, *Masserie medievali. Masserie massari e carestie da Federico II alla Dogana delle Pecore* (Bari, 1998), 13-25. It has been suggested elsewhere in Apulia that *masserie* were situated on the same sites as former Roman villas. See A. Ambrosi, 'Schemi propositivi per lo studio dell'architettura della masseria pugliese', in *Contribuiti allo studio del paesaggio urbano e rurale della masseria in Puglia; quaderni della scuola di perfezionamento in pianifacazione urbana e territorale* (Bari, 1983), 7-20; L. Mongiello, *Le masserie di Puglia* (Bari, 1984). The fortified *masseria* of Torre Alemania near Ascoli has been shown to have had a small nucleus of settlement at least as early as the thirteenth century. See R. Licinio, *Castelli medievali: Puglia e Basilicata, dai Normanni a Federico II e Carlo I D'Angiò* (Bari, 1994), 145. Also see the interesting development of the excavated site at Faragola (near Ascoli) in its transition from Roman villa to early medieval peasant village to *masseria* in G. Volpe, R. De Venuto, R. Goffredo & M. Turchiano, 'L'abitato altomedievale di Faragola (Ascoli Satriano)', in G. Volpe & P. Favia (eds.), *V Congresso Nazionale di Archaeologia Medievale* (Florence, 2009), 284-90; G. Volpe, G. De Felice & M. Turchiano, 'Faragola (Ascoli Satriano). Una residenza aristocratica tardoantica e un villaggio altomedievale nella Valle del Carapelle: primi dati', in Volpe & Turchiano (eds.), *Paesaggi e insediamenti rurali*, 265-97; G. Volpe, 'A late Roman villa at Faragola, Italy, in Minerva', *The International Review of Ancient Art & Archaeology*, 17.1 (2006), 44-5; P. Favia, 'Temi, approcci, metodologici, modalità e problematiche della ricerca archeologica in un paesaggio di pianura di età medievale: il caso del Tavoliere di Puglia', in N. Mancassola & F. Saggioro (eds.), *Medioevo, paesaggi e metodi* (Mantova, 2006), 179-98.

Figure 7.3 Ascoli Satiano in 1703



Source: G. Pacichelli, *Il Regno di Napoli in prospettiva…* (Naples, 1703).

Locorotondo became more dispersed through the nineteenth and twentieth centuries, although it certainly did not conform to the typical Southern Italian agro-town structure in the eighteenth century – and probably never did. Certainly there was a town centre tucked away behind the walls; home to the church, taverns, and artisan shops. However, this co-existed with a level of dispersed settlement, as we can make out from indirect evidence. Clusters of *trulli* known as '*jazzeleri*' were mentioned by notaries, which were clearly out in the countryside.[1000] The numerous stones found in the area were intelligently used to create networks of aqueducts to bring water to the individual farms, and of course, were used for the fences and enclosures which separated the *trulli*.[1001] By the census of 1811, 37 percent of inhabitants were living outside the walls and in '*nuovi borghi*'.[1002] Five local associations were noted in the nineteenth century charged with maintaining and

[1000] Galt, *Far from the church bells*, 76-7.

[1001] Maranelli, *Considerazioni geografiche*.

[1002] Galt, *Far from the church bells*, 151.

repairing the winding web of narrow roads that connected the spread of vineyards and *trulli*.[1003]

In this section, we have learnt a number of things. First, there appears to be a general relationship between economic polarisation and the proliferation of agro-towns across the Mediterranean. Second, economic polarisation was a feature of Southern Italian society at least as early as the eighteenth century, but probably even earlier (in the absence of good data). Third, the large concentrated town structure had also emerged in Southern Italy by at least as early as the eighteenth century (though it may have appeared much earlier but was disrupted by earthquakes[1004] and the great pestilences of the seventeenth century). It seems that agro-towns and inequality do not just go together with the modern twentieth century data, but have had an association together much further back in history. This phenomenon is supported from elsewhere in Southern Italy, where the eighteenth century concentrated town structure of Calopezzati in Calabria knew a Gini-coefficient of 87 percent for distribution of landownership in the eighteenth century.[1005] This can be contrasted with my own database for a number of small villages and dispersed settlements in the Cosentino area of Calabria (surrounding Cosenza) which had an average Gini-index of 60 percent in 1747.[1006] This chronological point not only strengthens the association of agro-towns and polarisation in a longer-term perspective in Southern Italy, but has relevance for the following section on *latifundia* and modes of exploitation.

B: Agro towns and *latifundia*

In the literature, as well as an association between inequality and the proliferation of agro-towns in the Mediterranean, scholars have also tended to link this characteristic

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[1003] E. Presutti (ed.), *Inchiesta parlamentare sulle condizioni dei contadini nelle provincie meridionali e nella Sicilia. Puglie*, iii (Rome, 1909), 11.

[1004] Ascoli was almost totally destroyed by a terrible earthquake on the 5th of December, 1456, forcing the surviving inhabitants to abandon and resettle in a new site in the '*Valle degli Antichi Tre Colli*' (Valley of the Three Ancient Hills), where the current town is now situated. See, Todisco Grande, 'Memoria', 131. Earthquakes were common in this part of Southern Italy (Ascoli was again hit in 1851), and the 1456 earthquake was particularly severe with Molisa, Campania, the Abruzzo, Basilicata and Apulia all affected and the number of victims estimated between 30,000 and 100,000. See, B. Helly, 'Case studies', in F. Ferrigni et al. (eds.), *Ancient buildings and earthquakes. The local seismic culture approach: principles, methods, potentialities* (Bari, 2005), 139.

[1005] F. Assante, *Calopezzati: proprietà fondiaria e classi rurali in un Comune della Calabria (1740-1886)* (Naples, 1964), 41.

[1006] My database taken from ASC, Catasto Generale Onciario, vol. 17 (various).

settlement structure with certain modes of exploitation: in particular, large estate agriculture with monoculture grain-cultivation (*latifundia*), operated by former feudal lords or absentee speculators, and working a system of low capital investment and high labour intensity.[1007] Probably this association has been widely accepted because so little of the research has been historically rigorous. A connection is drawn between the latifundist agriculture which swept across large parts of Southern Italy in the nineteenth century and the large towns which housed the impoverished wage workers. These towns have even been referred to as 'Company Towns'; places like Cerignola or Andria where poor people were crowded into rented hovels, with the worst of living conditions, often with no windows, and located underground.[1008]

While the association of agro-towns with economic polarisation was supported by going back in time, the historical perspective makes the link between agro-towns and *latifundia* less convincing. It is a simple case of chronology. In Apulia, latifundist exploitation of large grain estates did not take off until the second half of the nineteenth century. Yet large concentrated towns had appeared certainly on the vast northern plains by the eighteenth century, and who knows – without the earthquakes and the pestilences perhaps this town structure would already have been crystallized before the mid seventeenth century? It could be said that in some parts of Southern Italy, the large concentrated town structure was already set in place, well before the emergence of *latifundia*. In the case of Ascoli Satriano, the (re-) emergence of this town after the demographic crisis of the seventeenth century occurred in a surprising context of a mixed-focus on arable and pastoral enterprises, high levels of capital investment in large flocks and herds of animals, and its establishment as a commercial or trading centre.[1009]

In northern Apulia, the pestilences of 1656 halted any trend towards arable cultivation on large estates.[1010] The large elite landowners quickly shifted investment strategy towards sheep farming with smaller labour intensive demands.[1011] It is thus

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[1007] A link noted in A. Ciufredda, 'Massari e mercanti di piazza. Storie di famiglie e percorsi individuali nelle medie città pugliesi tra sei e settecento', *Mélanges de l'Ecole Francaise de Rome. Italie et Méditerranée*, 112.1 (2000), 176.

[1008] Snowden, *Violence*, 41-61.

[1009] N. Colclough, 'Variation and change in land use and settlement patterns in South Italy: Ascoli Satriano 1700-1990. The making of a southern agro-town', *History & Anthropology*, 21.1 (2010), 9-11.

[1010] See the descriptions in P. Ardoini, *Descrizione del Stato di Melfi (1674)*, ed. E. Navazio (Lavello, 1980). Also see J. Marino, 'I meccanismi della crisi nella dogana di Foggia nel XVII secolo', in A. Massafra (ed.,) *Problemi di storia delle campagne meridionali nell'età moderna e contemporanea* (Bari, 1981), 309-20.

[1011] For example, the case of the Prince of Melfi in S. Zotta, 'Momenti e problemi di una crisi agraria in uno 'stato' feudale napoletano (1585-1615)', *Mélanges de l'École Francaise de Rome*, 90 (1978), 717-96.

curious that demographic recovery at the end of the seventeenth century coincided with high capital investment in pastoral farming. In Ascoli, the Catasto Onciario recorded nearly 30,000 animals, a significant amount in comparison to the 2000 found in Locorotondo. Almost 95 percent of these animals were of the type associated with pastoral farming (sheep or goats, for example), while the small remainder were subservient to arable tasks (for example, donkeys for carting and oxen for ploughing). The pastures had the most inequitable distribution of all the land – only three percent of the population had access to grazing in the eighteenth century. The average size of a pastoral landholding belonging to an individual or institution was over 200 hectares. Only 15 percent of the population had access to an animal, and it was only this high because some of the impoverished labourers had a donkey to carry goods from the fields.

Polarised access to pastures and animals was testament to the pattern of high capital investment in large flocks and herds. Eight-five percent of all animals were consolidated in the hands of the top 10 landowners in Ascoli. Some of these landowners had extremely large herds, such as the Marquis of Basilicata, Don Alessandro Rinuccini, who by himself owned a third of all animals listed in whole Catasto including 10,000 sheep amongst others. These animals were grazed out on *masserie* belonging to the Locazione del Feudo, west of Ascoli and centred on the present-day hamlet of Palazzo d'Ascoli. Until the late seventeenth century, these enterprises were run by the Crown, which specialised in horse-breeding for the army; however it had come into the hands of the Marquis through royal debts.[1012] These large pastoral enterprises were frequently in the hands of absentee institutions since 80 percent of the pastures belonged to non-residents, often ecclesiastical institutions.

This is all very curious. Why did places like Ascoli grow into large towns when in theory, pastoral enterprises were supposed to be more labour extensive and support less employment than grain estates? How can we account for the large inward migration into Ascoli in the eighteenth century and where was the attraction? Indeed, 32 percent of the households in the Onciario of 1753 were living in Ascoli as

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For the general process, see J. Marino, 'Economic idylls and pastoral realities: the trickster economy in the Kingdom of Naples', *Comparative Studies in Society & History*, 24.2 (1982), 230. Prior to the pestilence, investment was more restricted to arable farming. See A. Lepre, *Feudi e masserie, problemi della società meridionale nel '600 e nel '700* (Naples, 1973), 85-123. In nearby Basilicata, see S. Zotta, 'Azienda agraria e sussistenza in una terra lucana all'inizio del Seicento', in P. Villani (ed.), *Economia e classi sociali nella Puglia moderna* (Naples, 1974), 180.

[1012] Giustiniani (ed.), *Dizionario-geografico*, ii, 6.

immigrants, and this mobility was seen all across Southern Italy.[1013] Unfortunately while we know the place of origin for all of these people (people came from all over Apulia and Basilicata to live and work in Ascoli),[1014] the *Catasto* did not record occupations for immigrants. They were not all poor labourers looking for work, though. Some were referred to as 'magnificent', indicative of elite status, while others were doctors, clerics, and widows.[1015]

Neville Colclough has contributed to our understanding of occupational structure in Ascoli in the eighteenth century by using a list of hearths from 1728; the results of which support the notion that Ascoli hardly fitted into the perception of the stereotypical agro-town. Only about 35 percent of the population worked on large estates, and these were not always grain. Agricultural labourers made up a minority of the population. In fact, Ascoli had a high amount of inhabitants working outside agriculture, either in professional or clerical roles, or in mercantile or industrial roles as craftsmen or apprentices. These seem to cut against the general works which suggest agro-towns possessed minimal urban economic functions. Colclough's figures from 1728 suggested that almost half the people in Ascoli worked in the 'urban sector',[1016] and this is supported by my data from 1753 which recorded 40 percent of the inhabitants in urban occupations – still a high figure. The rural economy of early modern Holland has been characterised as being highly 'industrialised' with 45 percent of the population in non-agricultural occupations, to add some perspective.[1017]

Thus certainly the growth of Ascoli, and in all likelihood many of the agro-towns within its vicinity, was able to occur in the context of the pastoral economy dominated by a select few absentee (often ecclesiastical) landlords and institutions because there were enough industrial and commercial opportunities for the inhabitants to pursue. Although some of the inhabitants worked on the large estates, most of this work was actually taken on by temporary seasonal workers from the

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[1013] Most famously in the work of W. Douglass, *Emmigration in a South Italian town: an anthropological history* (New Brunswick, 1984).

[1014] The wide geographical span of origin for immigrants into Ascoli has also been suggested in S. Russo, 'Uomini e colture: questioni di carte', in R. De Lorenzo (ed.), *Storia e misura. Indicatori sociali ed economici nel Mezzogiorno d'Italia (secoli XVIII-XX)* (Milan, 2007), 81.

[1015] The diverse status of eighteenth and nineteenth century immigrants in the Capitanata has been addressed in S. Russo, *Storie di famiglie. Mobilità della ricchezza in Capitanata tra Sette e Ottocento* (Bari, 1995); 'La cerealicoltura del Tavoliere e la montagna appenninica (secoli XVIII-XIX)', in A. Calafati & E. Sori (eds.), *Economie del tempo. Persistenze e cambiamente negli Appennini in età moderna* (Milan, 2004), 117-25.

[1016] Colclough, 'Variation and change', 5.

[1017] van Zanden, 'A third road to capitalism?'; 'Taking the measure'.

south of Apulia and the central uplands, who did not own property in Ascoli and rented rooms from wealthy aristocrats in the town and took up notarized six-month contracts to work the estates.[1018] It seems then that these so-called agro-towns may have emerged through a context of economic polarisation – but it did not necessary mean that had anything to do with *latifundia*.

7.2 Agro-towns, economic polarisation and causality

Large concentrated towns grew and proliferated in much of the Mediterranean, often under conditions of exceptionally high economic polarisation. Even other places well-known for high differences between rich and poor in the seventeenth and eighteenth centuries, such as the parts of the central river area or parts of east and north Groningen had lower Gini-indexes (85 and 81 percent respectively) than the 97 percent calculated for Ascoli.[1019] The question still remains, why did this extreme consolidation of property in the hands of a few dominant interest groups lead to the establishment of concentrated towns in the Mediterranean?

Probably the answer is very simple. The consolidation of land into very few hands meant that a wide proportion of the population had no access to land, which in turn meant that very few people had the opportunity to permanently settle out in the countryside. It was not as if the large absentee landlords were ever willing to divide up some of their landed estates to lease to local people as farmers. Whether they were arable or pastoral estates, it did not matter. In Southern Italy there was consistently a culture of direct farming in hand. Landlords were not directly involved in the management (some of the lay aristocrats probably were resident in Naples), but instead entrusted their *massari* or stewards with the tasks. Even when land was conceded to local people, for example when large landlords tried to get colonists to bring wastelands into cultivation in Sicily in the late sixteenth and seventeenth centuries, the resulting settlements were all concentrated towns.[1020] Colonists were not granted their own plots with favourable jurisdictions as what happened from the

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[1018] As in Cerignola. See S. Russo, 'I lavoratori delle masserie: geografia della provenienze', in *Il paesaggio agrario di Cerignola fra Settecento e Ottocento* (Cerignola, 1999), 29-31.

[1019] See the conclusion of this thesis.

[1020] F. Benigno, *Una casa, una terra: ricerche su Paceco, paese nuovo nella Sicilia del Sei e Ottocento* (Catania, 1985); T. Davies, 'Village-building in Sicily: an aristocratic remedy for the crisis of the 1590s', in P. Clark (ed.), *The European crisis of the 1590s. Essays in comparative history* (London, 1985), 191-208.

high Middle Ages onwards in Northern Europe. The property structure did not change at all since all the concessions were largely temporary.[1021]

The lack of access to land to actually settle upon being the causal link between economic polarisation and agro-towns can be highlighted by looking at a reverse case. Why did Locorotondo not develop the same concentrated-town structure as most other parts of Apulia? The reason surely must be found in the fact that 82 percent of its population in the eighteenth century (a key settlement development phase) had access to land, in comparison to just 26 percent in Ascoli. Furthermore, the Ascoli figure was only this high because many of its inhabitants managed to scrape together some tiny morsels of vineyards, attached to the town walls. Either through outright ownership or emphyteutic concession, the inhabitants of Locorotondo were able to build their stone *trulli* out in the countryside, simply because they had the physical and practical means to do so. These peasants built their *trulli* next to their plots. To strengthen the point, it is no coincidence that in the Cosentino area of Calabria with its small villages and scattered farmsteads, land was accessible to a relatively high (relative to the agro-town areas) proportion of the total population (around 70 percent of the inhabitants).[1022]

7.3 Agro-towns and economic polarisation: the long term perspective

So far it has been argued that economic polarisation and the proliferation of the large towns in Southern Italy is a causally connected phenomenon, while latifundist agriculture only added to an already existing structure. Although interesting, still this conclusion is not satisfying. Why did this sort of economic polarisation manifest itself in Southern Italy, and why was it prolonged over the long term? The answer to this question is the ultimate answer to why the agro-towns have become such a characteristic feature of the Mediterranean landscape.

The problem is (as noted in section 1b) that agro-towns did not all emerge in the same social and economic contexts, and thus by the same token, different regions and societies took different routes towards their own economic polarisation. There was not one Mediterranean path towards inequality. The economic polarisation that led to the development of some of the most 'classic' agro-town territory on the

[1021] V. Ricchioni, 'Della proprietà fondiara privata nel Mezzogiorno avanti le riforme francesi', in *Studi storici di economia dell'agricoltura meridionale* (Florence, 1952), 39-42.

[1022] My database taken from ASC, Catasto Generale Onciario, vol. 17 (various).

northern plains of Apulia, for example, was reinforced and locked in place over the long term by some very specific institutional and political power constellations.

One of the key differences between agro-town areas such as Ascoli on the northern plains of Apulia and the scattered *trulli* of the inland Murgia where Locorotondo was located was the divergent colonisation conditions each region experienced, a long time prior to the eighteenth century. In Locorotondo, local peasants were by the sixteenth century colonising the woodlands and wastes with their own private enclosures. At the time when the town of Locorotondo bought its hinterlands from the Royal Court in 1566 (establishing its territorial borders),[1023] the settlement was located in the middle of a large common territory which ran from Monopoli on the coast to Ostuni in the south-east.[1024] The communities of nearby Martina Franca, Fasano, Cisterino, as well as Locorotondo, benefited from the common rights of grazing and collection of wood.[1025] Around the mid sixteenth century, however, inhabitants began to encroach into the commons, something which the Royal Court struggled to prevent. It was noted in the document from 1566 that much of the land was now enclosed and had vineyards belonging to farmers from Locorotondo and Martina Franca.[1026] The document also mentioned two *jazzèleri*, Trito and S. Marco, showing how the seeds of dispersed settlement had already been laid. It was also noted that it was now legal to plant vineyards and gardens under private ownership, which effectively meant that by the eighteenth century, all common land ceased to exist in Locorotondo.[1027] This early encroachment by local farmers allowed them to build up a firm property base by the eighteenth century, which gave them stronger foundations in opposition to feudal lords.

Ascoli, like similar settlements on northern plains such as Cerignola, Troia, Foggia, Lucera, Candela, and Andria, had an entirely different situation. These settlements all lay within the Tavoliere; a plain that was rigorously managed by the Royal Customhouse of Naples, which supervised a system of transhumant pastoral

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[1023] G. Sampietro, *Fasano: indagni storiche* (Fasano, 1922), 254-63.

[1024] Galt, *Far from the church bells*, 69.

[1025] On the early rights, see B. Cascella, 'I magistri forestarii e la gestione delle foreste', in R. Licinio ed., *Castelli, foreste, masserie: potere centrale e funzionari periferici nella Puglia del secolo XIII* (Bari, 1991), 47-94; R. Travaglini, *I limiti della foresta oritana in documenti e carte dal 1432 al 1809* (Oria, 1977).

[1026] D. Chirulli (ed.), *Istoria cronologica della Franca Martina cogli avvenimenti piu notabili del Regno di Napoli* (Martina Franca, 1982), 217-41.

[1027] See the reports on the condition of the commons in ASB, Atti Demaniali (1809), no. 69.

sheep farming between Apulia and the mountains of the Abruzzo.[1028] Transhumance between the two regions probably had Roman origins, though the system retracted in the early Middle Ages with the collapse of the long-distance trading networks.[1029] When the Normans arrived in Apulia, transhumant farming probably picked up again (from around the eleventh century onwards), although the Royal Customhouse only formalised the institutions necessary for its management in 1447.[1030] In the high and late Middle Ages, arable farming still had a dominant role to play in the Apulian economy and was a key supplier of grain to the growing Northern and Central Italian cities.[1031]

The rationale behind the Royal Customhouse of Naples was to create a balance between arable and pastoral land on the Tavoliere.[1032] Alongside the Castilian *Mesta*, it was Europe's largest managed pastoral economy.[1033] Privately owned arable land was grazed during fallow periods, while royal pastures were never cultivated. Wool and wheat were cash products which were to be sold in Naples[1034] (the most populous city in Western Europe before the plagues of 1656);[1035] therefore the ratio between arable and pasture fluctuated with the trends of demand and prices for agricultural goods. Grain fed the kingdom while taxes on sheep provided its riches.[1036] Cultivation on the Tavoliere was not 'forbidden' as suggested by Frank

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[1028] For a superb explanation of how it worked see Marino, *Pastoral economics*. The plain measured 397,336 hectares in 1806. See ASFO, Tavoliere, i, no. 67, fos 57-64.

[1029] G. Barker, 'The archaeology of the Italian shepherd', *Proceedings of the Philosophical Society*, 25 (1989), 13; M. Corbier, 'La transhumance entre le Samnium et l'Apulie: continuities entre l'époque républicaine et l'époque impériale', in G. d'Henry (ed.), *La romanisation du Samnium aux IIe et le siècles av. J.-C.* (Naples, 1991), 161; C. Nicolet, *Rome et la conquête du monde méditerranéen. Les structures de l'italie romaine*, i (Paris, 1977), 107. Some argue for an even earlier date, for example, see K. Lomas, *Rome and the western Greeks 350 BC – AD 200. Conquest and acculturation in southern Italy* (London, 1993), 122-3.

[1030] The founding charter from Alfonso of Aragon who conquered the Kingdom of Naples in 1447 has been printed in S. Grana, *Istituzioni delle leggi della Regia Dogana di Foggia* (Naples, 1770), 72-9.

[1031] Abulafia, 'Southern Italy and the Florentine economy', 380-2.

[1032] For an explanation of the rationale, see S. Di Stefano, *Della ragion pastorale* (Naples, 1731).

[1033] For a comparison with the Mesta, see J. Klein, *The Mesta: a study in Spanish economic history, 1273-1836* (Cambridge MA, 1920); R. Pastor de Togneri, 'La lana en Castilla y Léon antes de la organización de la Mesta', in M. Spallanzani ed., *La lana come materia prima. I fenomeni della sua produzione e circolazione nei secoli XIII-XVII* (Florence, 1974), 253-67.

[1034] Fortunate for Ascoli, it was situated on a key overland transport link with Naples. See A. Massafra, *Campagna e territorio nel Mezzogiorno fra Settecento e Ottocento* (Bari, 1984), 199.

[1035] See C. Petraccone, *Napoli dal Cinquecento all'Ottocento. Problemi di storia demografia e sociale* (Naples, 1975).

[1036] Apulia accounted for over a fifth of total grain imported into Naples between the mid sixteenth and mid seventeenth centuries. G. Coniglio, *Il viceregno di Napoli nel secolo XVII. Notizie sulla*

Snowden, but merely strictly regulated.[1037] However, such was the high fertility of the plains of the Tavoliere in Northern Apulia, many of the large farmers in the early modern period showed frustration that so much land was kept reserved for pasture – they wanted to exploit the excellent yields in grain.[1038]

With such a rigorous management of the Tavoliere from its base in Foggia, building and cultivation became extremely restricted out on the plains. In that respect the Tavoliere became depicted as a barren wilderness, comparable to the Steppes of Central Asia.[1039] The land became divided into *locazioni*, each comprised of a number of isolated farms known as *masserie*. Livestock farms were more complex than grain farms, took up more space, and included a wider range of buildings such as dog kennels, animal stables, sheep pens, cheese processing sites, and threshing floors.[1040] In particular the complex belonging to the abbey of S. Leonardo di Siponto at their Feudo di Torre Alemanna had all these things as well as taverns, olive presses,[1041] and bakeries inside an almost fortified design.[1042] *Locazioni* were also subdivided between smaller huts (*capanne*), which belonged to shepherds and often included a church nearby.[1043] In sum, the potential for acquisition of land by local inhabitants such as those at Ascoli Satriano was severely restricted by the

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commerciale e finanziaria secondo nuove ricerche negli archive italiani e spagnoli (Rome, 1955), 37. On the balancing of the ratios between arable and pasture, see R. Cardone, 'Foggia all'epoca di Masaniello', *La Capitanata*, 38 (2001), 207-54; M. Magno, *La Capitanata dall pastorizia al capitalismo agrario (1400-1900)* (Rome, 1975); M. Orlando, 'Storia e società in Capitanata al tempo della Battaglia di Cerignola (28 aprile 1503)', *La Capitanata*, 17 (2005), 195.

[1037] F. Snowden, 'The city of the sun: Red Cerignola, 1900-15', in R. Gibson & M. Blinkhorn eds., *Landownership and power in modern Europe* (London, 1991), 201.

[1038] ASP, Archivio Alliata (1560), no. 14.

[1039] The second biggest province in terms of area in the Kingdom of Naples and frequently the least populous in the early modern period. See A. La Cava, 'La demografia di un commune Pugliese nell'età moderna', *Archivio Storico per le Province Napoletane*, 25 (1939), 25-66.

[1040] S. La Sorsa, 'La pastorizia pugliese e le sue costumanze', *Archivio 'Vittorio Scioloja' per le Consuetudine Giuridiche Agrarie e le Tradizioni Popolari Italiane*, 8 (1941), 8-11; A. Bissanti, 'Il Tavoliere di Puglia', in C. Colamonico (ed.), *La casa rurale nella Puglia* (Florence, 1970), 70-91.

[1041] Olive tree cultivation was labour and capital intensive, thus mainly ecclesiastical institutions constructed olive presses in the Terra di Bari and the Capitanata. See R. Licinio, 'L'organizzazione del territorio fra XIII e XV secolo', in C. Fonseca & D. Blasi (eds.), *La Puglia tra medioevo ed età moderna. Città e campagna* (Milan, 1981), 215; G. Poli, *Territorio e contadini nella Puglia moderna. Paesaggio agrario e strategie produttive tra XVI e XVIII secolo* (Galatina, 1990), 65.

[1042] G. Laurenti, 'Visita dell'abbatia o precettoria di S. Leonardo di Puglia e dell'abbatia di S. Maria di Banzi', in A. Massafra & A. Ventura eds., *Il patrimonio dell'Abbazia di S. Leonardo di Siponto: illustrazione e trascrizione del manoscritto di una visita pastorale di fine secolo XVII conservato nella Biblioteca provinciale di Foggia* (Foggia, 1978), 43-89.

[1043] For example, see the map of the Locazione d'Orta in ASFO, Dogana delle Pecore di Foggia, i, no. 20.

institutional management of the plains, thereby restricting settlement out in the countryside also. The point is reinforced by the fact that on the Tavoliere lays the remnants of a host of former villages, abandoned between the fourteenth and sixteenth centuries. Up to around the fifteenth century, this sort of settlement structure was possible on the plains of the Tavoliere, but was quickly destroyed under the emergence of state-organised transhumance practices.[1044] The polarised landholding structure also had roots in this early institutional control of local resources. From the sixteenth century onwards Naples favoured the large landowners and those with the larger flocks, and were often given the best grazing lands.[1045] The best grazing lands were very close to Ascoli, especially the *locazioni* of Orta and Ordona, because they had previously gone under the plough.[1046] The skewed property distribution came to be locked-in over the long term (and further polarised from the sixteenth century onwards),[1047] with smallholders put at a constant disadvantage.

The second reason for the perpetuation of the polarised property structure in much of Apulia lay in the modes of exploitation, which were informed by the particular balances of political power. Indeed, the fact that a wider section of the population in Locorotondo received access to land through emphyteutic concessions was down to the fact that the elite landowners in Locorotondo were a lot weaker than to be found in other parts of Southern Italy such as Ascoli. In Locorotondo, there was a greater power struggle between social groups than seen in typical agro-town areas.

The fee of Locorotondo had belonged to the Duke of Martina, Francesco Caracciolo I, since 1645; bought from another noble family of the town of Monopoli.[1048] The Duke was the largest landowner in Locorotondo in 1749 with 355

[1044] See R. Licinio, *Uomini e terre nella Puglia medievale. Dagli svevi agli Aragonesi* (Bari, 1983); *Masserie medievali*; C. Delano Smith, 'Villages désertés dans les Pouilles: le Tavolière', in *I paesaggi rurali europei* (Perugia, 1975), 125-40; C. Klapisch Zuber, 'Villagi abbandonati ed emigrazioni interne', in *Storia d'Italia. I documenti*, v (Turin, 1973), 345-9.

[1045] See the abuses of power and concessions to favourites listed in F. De Dominicis, *Lo stato politico, ed economico della Dogana della Mena della Pecore di Puglia*, iii (Naples, 1781), 37-9.

[1046] A. Gaudiani, *Notizie per il buon governo della Regia Dogana della mena della pecore di Puglia*, ed. P. Di Cicco (Foggia, 1981 [1715]), 100.

[1047] M. Nardella, 'Terre di portata e terre salde di Regia corte: le aree di cereali-coltura estensiva nei territori soggetti alla giurisdizione della Dogana', in *Decimo convegno sulla preistoria, protostoria e storia della Daunia* (San Severo, 1989), 187-92; 'Produzione mercantile e intervento dello Stato nella seconda metà del Cinquecento: le terre a cerealicoltura estensiva della Dogana delle pecore di Foggia', in *Undicesimo convegno sulla preistoria, protostoria e storia della Daunia* (San Severo, 1990), 279-90.

[1048] M. Capograssi, 'Due secoli di successioni feudali registrati nei cedolari di Terra di Bari', *Rivista Araldica* (1956), 192; A. Carrino, *La città aristocratica. Linguaggi e pratiche della politica a Monopoli fra Cinque e Seicento* (Bari, 2000), 253-61.

hectares to his name (seven percent of the territory). Proportionally, the Duke of Ascoli, Don Sebastiano Marulli did not hold much more; around nine percent of the total. However, the territory of Ascoli Satriano was a lot larger than that of Locorotondo (the nine percent corresponded to 3290 hectares); thus comprised an estate around 10 times the size of the Duke of Martina Franca. Furthermore, the quality and fertility of the Locorotondo land was significantly lower than the lush plains around Ascoli. The Caracciolo family did have estates outside Locorotondo in the nearby regions, but at the same time the Marulli family of Ascoli similarly had *masserie* in other parts – particularly to the south.[1049] The landed weaknesses of the large landowners in Locorotondo in comparison to the agro-town regions of Apulia is shown by the fact that the top 10 Locorotondese landowners only comprised 14 percent of the total land; paling in comparison to the 58 percent in the hands of the top 10 Ascoli landowners. The Duke of Martina Franca (lord of Locorotondo) had all things one would associate with feudal estates: a castle, a tavern, a butchery, craft shops, furnaces, and a mill – even underground snow-storage facilities.[1050] The Duke of Ascoli, however, had all these things but in greater quantity.

As mentioned already, the power of the elite landowners in Locorotondo was likely curtailed by the high levels of local farmer or peasant landownership, which had its roots in the early colonisation of the common woods. The weak position of the Locorotondo landlords translated itself into jurisdictional problems, especially for the feudal lord, the Duke of Martina Franca.[1051] The relationship between the local municipal authorities (*università*) and the aristocratic elite was symptomatic of the general weakening of large landlords' power. Before 1550, the municipal government tended to support the prevailing aristocratic and baronial groups. However, as the woodlands began to be cleared and more investment was put into agriculture, the municipal authorities instead began to align themselves away from the barons and more towards serving the interests of the local community which was expanding in size and influence.[1052]

[1049] E. Papagna, *Sogni e bisogni di una famiglia aristocratica: i Caracciolo di Martina Franca in età moderna* (Milan, 2002), 67. The distribution of these lands is mapped in E. Papagna, 'Dimensione territoriali e rappresentazione cartografica di una signoria feudale in età moderna', in G. Giarrizzo & E. Iachello (eds.), *Le mappe nella storia. Proposte per una cartografia del Mezzogiorno e della Sicilia in età moderna* (Milan, 2002), 33-43.

[1050] G. Guarella, 'Niviere e vendita della neve nelle carte del passato', *Rifessioni Umanesimo della Pietra*, 11 (1988), 117-24.

[1051] On this process see A. Cofano, *Storia antifeudale della Franca Martina* (Fasano, 1977).

[1052] V. Di Michele, 'Fermenti di rivolta antibaronale nella Locorotondo della prima meta' del Settecento', *Locorotondo, Rivista di Economia, Agricoltura, Cultura e Documentazione*, 4 (1988), 113.

A document from 1605 mentions an agreement between the local municipal authorities and the barons over recognized privileges in Locorotondo.[1053] Even though it was created before the Caracciolo family purchased the fee of Locorotondo, it turned out to be an imported and controversial piece. As the Duke of Martina Franca began to see his jurisdictional powers over Locorotondo waning in the eighteenth century, he increasingly took recourse to ancient rights found in old documents in an attempt to stem the general trend towards heightened municipal autonomy. In 1754, conflict had led the Duke to make three demands on the municipal authorities, arguing that they owed him three sums annually.[1054]

1 A sum of 48 ducats for ovens, mills and herbage, on the basis that this was agreed in 1502 and 1509 with previous barons Alberico and Alessandro Carafe. The municipal authorities refuted this by arguing that this was only signed by the barons.
2 A sum of 200 ducats as a tribute for autonomy afforded the municipal authorities by the barons.
3 A sum of 50 ducats as a direct charge to the municipal authorities covering a fine for the marriage of sisters in the territory, and also to readdress perceived underpayment by the municipal authorities for half of the lands bought from former barons, the Loffredo family.

The weak position of the feudal lords was highlighted by the fact the *università* refused outright to pay these sums, and in fact, turned the claims on their head by suggesting they themselves had been overcharged over the years. By this time all the feudal lords had left was physical bullying tactics and desperation: when a local chapter built a mill in 1754, the Duke appealed to the Bishop of Ostuni (unsuccessfully) to prohibit the building of mills outside his domain. Eventually the Duke lost his tithe of a twentieth,[1055] and while the feudal lords renewed their complaints in 1785, by this time they were well beaten.[1056] During the course of the

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[1053] G. Guarella, 'L'università di Locorotondo: i Borassa e le capitolazioni del 1605', *Locorotondo, Rivista di Economia, Agricoltura, Cultura e Documentazione* **4** (1988), 28.

[1054] F. Fumarola, 'Appunti della storia di Locorotondo', in *Società ed economia a Locorotondo attraverso i bilanci comunali (1817-1842)* (unpublished thesis); accessible at <http://digilander.libero.it/locomind/storia/fumarola%201.htm>.

[1055] Although refusal to pay this onerous twentieth was common in Apulia in the seventeenth and eighteenth centuries. L. Masella, 'Decime e demani: l'eversione della feudalità in terra d'Otranto', *Quaderni Storici* (1972), 284-301.

[1056] G. Baccari, *Memorie storiche di Locorotondo* (Fasano, 1869), 90-1.

eighteenth century, the municipal authorities stopped paying rent to the Duke, the *decime* and twentieth had disappeared, and total income in 1794 was down from its level in 1667.

Thus, in sum, the high levels of local access to land in Locorotondo, the proliferation of emphyteutic concessions, and the lack of grain-based large estate agriculture, was linked to the landed and jurisdictional weaknesses of the lords there – exacerbated by more difficult environmental conditions and the early encroachment of farmers into the forests. In Ascoli, as in many of the agro-town regions of Apulia, more land stayed in the hands of a dominant elite, because this property structure (at least on the plains) had been crystallized in place by the Royal Customhouse management of agriculture, but also because the elite landlords were stronger and did not face many jurisdictional battles and local challenges to their power. In fact, local communal and civic unions from the bottom-up appear to have been entirely weak in the agro-town areas.

Emphyteusis was actually attempted in some parts of the agro-town areas in the north of Apulia. From Cerignola to Bitonto in the nineteenth century, attempts were made to plant vineyards by enticing labour through improvement contracts; especially by the great landowners such as the Pavoncelli family. In the first phase of Pavoncelli planting, 1022 tenants were created, each with small plots of one to five hectares.[1057] In this situation, however, once the terms of the lease had ended after 27 to 29 years and improvements had been made, the land reverted back into the hands of the landlords, who retained a strong grip on property and agricultural production.[1058] This contrasted with Locorotondo where the emphyteutic leases had become almost heritable, and landlords lost their grip on property.

7.4 Escaping perceptions of the 'unchanging' Italian South

By approaching 'agro-towns' in a comparative light, it has been confirmed that the proliferation of this settlement structure across much of the Mediterranean was likely down to the high levels of polarisation in the distribution of land, which furthermore, was crystallized in place through developments much earlier than the eighteenth century. However, this does not mean that we need to subscribe to a very narrow view of Southern Italian society as something that was completely unchanging from the medieval period right up to the twentieth century. Yes, there was a great

[1057] G. Pavoncelli, *Un azienda vinaria in Capitanata* (Cerignola, 1897), 16.

[1058] Snowden, *Violence*, 35-40. Similarly land returned to the hands of large landowners in Calabria. See E. Sereni, *Il capitalismo nella campagne (1860-1900)* (Turin, 1968), 171-2.

continuity in polarised property structures across many centuries, but at the same time, this continuity was only possible because dominant social groups used a number of very dynamic and flexible methods to maintain the status quo. Feudal structures could co-exist with capital investment; structural continuity with elements of dynamism.[1059] We need to move away from viewing the development of Southern Italian towns with simple recourse to latifundist estates and homogenous pools of labour.[1060] The roots of the 'agro-town' in Ascoli (if we can still call it that) were actually laid down in a more commercial-pastoral context, as the town developed into a real trading post between Apulia and the city of Naples. It was only in the late nineteenth century that Ascoli, like many other towns around it, began to morph into the 'classical' picture of the agro-town supported by latifundist grain agriculture – and took on more unstable characteristics epitomised by the unpredictable and rapid rises and declines in population. By this time, the seeds of the town-structure had already been laid-down, and labourer immigration merely added to the pattern. Indeed, the disintegration of the Royal Customhouse did nothing to change the property distribution in Apulia, since this 'communal' land was simply sold to the highest bidders at auction, and was consolidated into the hands of a property speculators, former feudal lords, and urban entrepreneurs – the so-called grain-barons.[1061]

This research focusing on settlement structures within Southern Italy has more than anything, reminded us that we cannot continue to keep approaching the

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[1059] As seen in C. Rasmussen, 'Innovative feudalism. The development of dairy farming and 'Koppelwirtschaft' on manors in Schleswig-Holstein in the seventeenth and eighteenth centuries', *Agricultural History Review*, 58.2 (2010), 172-90; van Bavel, 'Land, lease and agriculture'.

[1060] A call made in Ciuffreda, 'Massari e mercanti di piazza', 176.

[1061] For the land sales after 1806 see A. Massafra, 'Equilibri territoriali, assetti produttivi e mercato in Capitanata nella prima metà dell'Ottocento' in *Produzione, mercato e classi sociali nella Capitanata moderna e contemporanea* (Foggia, 1984), 40-44; S. Russo, *Grano, pascolo e bosco in Capitanata tra Sette e Ottocento* (Bari, 1990); 54; S. d'Atri, 'Censuazione del Tavoliere e proprietà fondiaria a Cerignola', in *Il paesaggio agrario*, 33-46. For the ideological reform of the system in the Tavoliere see R. Colapietra, 'Gli economisti settecenteschi dinanzi al problema del Tavoliere', *Rassegna di Politica e di Storia*, 58 (1959), 24-32; 'Riforma e restaurazione del sistema del Tavoliere di Puglia', *Rassegna di Politica e di Storia*, 74 (1960), 26-32; 'L'Unità d'Italia e l'affrancamento del Tavoliere di Puglia', *Rassegna di Politica e di Storia,* 76 (1961), 22-32; P. Di Cicco, 'Il problema della Dogana delle Pecore nella seconda metà del XVIII secolo', *La Capitanata*, 4 (1966), 63-72; 'Censuazione ed affrancazione del Tavoliere di Puglia (1789-1865)', *Quaderni della Rassegna degli Archivi di Stato*, 32 (1964), 33-48. For the wider European context of the ideological move away from communal property forms, see M-D. Deméelas & N. Vivier eds., *Les propriétés collectives face aux attaques liberals (1750-1914). Europe occidentale et Amérique latine* (Rennes, 2003); R. Congost & J. Miguel Lana (eds.), *Cerrados, debates abiertos. Análisis histórico y propriedad de la tierra en Europa (siglos XVI-XIX)* (Pamplona, 2007).

Italian South (a) non-historically, but more significantly (b) as an unchanging society unable to escape its feudal past. We do need to go further into the past to seek the roots of more recent developments and divergences, and it is true that certain power and property structures may be locked in place over long periods of time. However, we must also be aware that sometimes these continuous structures sometimes actually got their durability through dynamic responses to changing conditions by key protagonists, sometimes in the short-term. The task for the future is to extend our historical enquiry into the 'agro-towns' of Southern Italy (and the Mediterranean, in general) with (a) a better understanding of the chronological development of concentrated towns, and (b) an appreciation of the fact that while agro-towns and economic polarisation are undoubtedly linked, the processes which maintained and reinforced inequalities in Southern Italy could be diverse and dynamic responses. By doing this, we may begin to nuance populist views on the origins of so-called 'stagnation' and 'backwardness' in the Italian South.

Chapter 8
Testing the theoretical framework: the link between society, strategies for resource management, and the resilience or vulnerability of settlements

In this thesis, a new theoretical framework has been constructed (laid out in chapter two) which may be used to explain why some settlement was resilient over the long term while other settlement was vulnerable to decline in the pre-industrial period. The aim of this chapter is to take the principles of this framework, and test it using the empirical data taken from the five case studies described in chapters four to eight. This chapter is arranged as follows. First, the four key configurations which make up pre-industrial societies (the arrangement of property, power, commodity markets, and modes of exploitation) are compared for each of the case studies. Each configuration is dealt with in turn. Second, the scores for each case study are calculated according to an assessment of how 'egalitarian' or 'polarised' they were (the test of equality), and an assessment of how 'dynamic' and 'persistent' they were (the test of capacity for change). Here we find out what 'types of pre-industrial society' each case study was. Third, the predicted strategies for resource management and in turn the predicted path of settlement development for each case study are revealed, according to the what should happen through applying the principles of the framework. Fourth, the actual strategies for resource management and the actual path of settlement development for each case study are offered – that is according to what actually did happen as reconstructed through empirical research. It is here we learn the strength of the connection between 'types of society', the strategies these societies employed for resource management and exploitation, and the extent to which settlements were resilient over the long-term or susceptible to decline, contraction, or collapse. Are the principles of the explanatory framework confirmed by the actual results? Fifth, some problems with the framework are discussed, and reasons are considered for any unexpected results. Sixth, the significance of the findings is placed in a wider perspective, some avenues for a future research agenda are proposed, and any contemporary uses for the work are highlighted.

8.1 The basic configurations of society

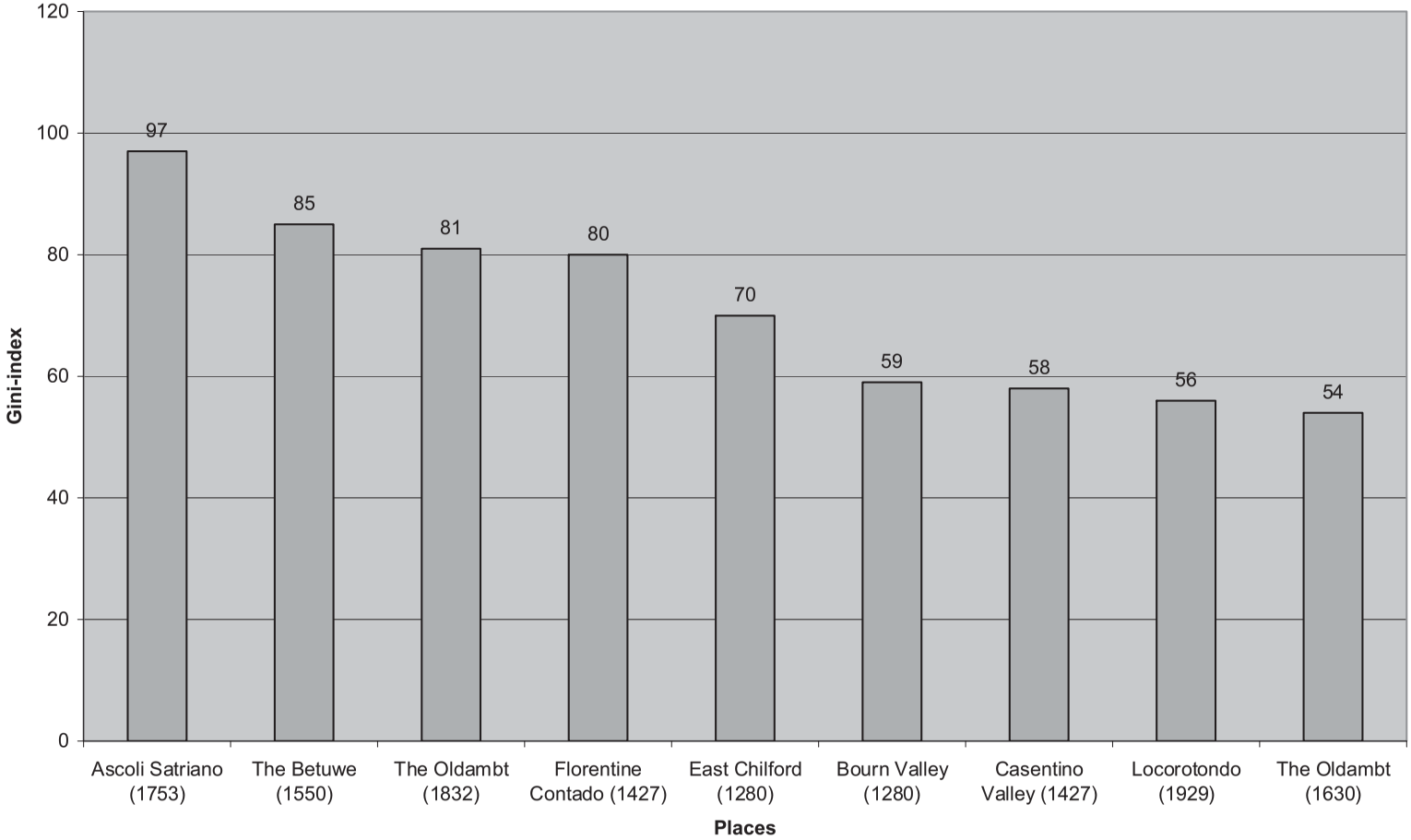
A: Property

The assessment of whether property distribution in each case study was deemed egalitarian or polarised was made with use of the Gini-coefficient index for inequality. According to this index, zero represents a totally equitable distribution of

resources (everybody has the same), while 100 represents a totally polarised society (one person has everything). For the purposes of the comparative process, it was decided that any society with 65 or more on the index were considered polarised. Societies with a Gini of less than 65 on the other hand were considered egalitarian. Although the selection of this cut-off point is somewhat arbitrary, 65 was deemed a good point because it was the average score of all the Gini-indexes recorded for the entire world in Ewout Frankema's table of distribution of landholdings by country.[1062] It is unsurprising that Ascoli Satriano had the most inequitable distribution of land, since a large proportion of it was consolidated in the hands of just a few aristocratic barons and lords and absentee ecclesiastical institutions. However, it must be conceded that the limitations of the sources may have made Ascoli appear much more polarised than the other places compared. Indeed, the Catasto Onciario used for Ascoli is an excellent source because it lists all inhabitants and landholders – even if they did not have any land. This is just as well, because only a quarter of the Ascoli population actually had access to land. The same luxury (for the historian) did not apply to all the sources, however. Many sources used for reconstructing landholding distribution left out the landless. Indeed, in many cases fiscal paupers were actually made exempt from taxation. Thus, in the places where sources were used which did not include landless (the Oldambt in 1630, both areas in Cambridgeshire, and the Betuwe), probably the real levels of inequality were slightly higher than what is reflected in the graph below.

[1062] It goes without saying that this is a problematic selection of a cut-off point. Indeed, Frankema's Gini-coefficients were for nineteenth and twentieth century contexts, not the pre-industrial world. However, the point is that we are not trying to be overly precise. In any case, that would be unnecessary given the limitations and problems associated with the sources for reconstructing landholding. All we need is a basic and rough indicator of what were the more equitable and inequitable case studies with regard to distribution of land. See Frankema, *Has Latin America*, 212-7.

Figure 8.1 Distribution of property across all five case studies according to the Gini-coefficient (at the user level)



Sources: Caley & Illingworth (eds.), *RH*, ii, 420-30, 510-20, 562-4, 568-9; Ventura (ed.), *Onciario 1753*; RAG, Kadaster 1832; GA, AMtB 2, 1170, no. 73; ASF, Catasto, nos. 179-81, 246, 250, 330; Herlihy & Klapisch-Zuber, *Census and property survey of Florentine domains*; S. Calella, *Colonizzazione e ruralizzazione. Un modello: il territorio di Locorotondo, Martina Franca, Aquaro e Dragonetti* (Cardone, 1972), 112.

In any case, five of the societies from the case studies were deemed to have had polarised distributions of land, courtesy of recording Gini-indexes higher than 65. In both the Oldambt (1832) and the Betuwe (1550), land was consolidated at the user level into the hands of large, wealthy tenant farmers. Land distribution was also unequal in the Florentine *contado*, due to the expropriation of peasant landownership in the late Middle Ages through the incursion of wealthy Florentines into the land market. The period 1200 to 1400 was one of transition for East Chilford. Up to the mid thirteenth century, the distribution of landownership had almost certainly been polarised, with land concentrated in the hands of manorial lords. From the second half of the thirteenth century the domination of the old signorial elite began to wane, although in its place during the fourteenth century emerged a clearly stratified social and economic hierarchy, and a growing gap between a group of acquisitive local tenants building up landholding through assarting and purchase or lease of former demesnes. Although there was no data to calculate a Gini-index for the Betuwe in the period 1129 to 1350, this area also was considered polarised in the distribution of landholding, because of the proliferation of large landowners there which was reconstructed in the research of van Bavel.

Four of the societies from the case studies had more egalitarian distributions of property, as their Gini-indexes were below 65. The most equitable distribution of land was in the Oldambt (1630), and was perhaps the most intriguing case because it made a transition from being an egalitarian free farmers' republic in the sixteenth and seventeenth centuries to a sharply polarised polder society of 'gentleman farmers' and impoverished labourers after roughly 1750. Locorotondo went the opposite way. At the time of the Catasto Onciario in 1749, it had a Gini-index of 77, however by the end of the period and with the dissemination of viti-culture and rural *trulli*, the Gini-index had declined substantially to 56. Despite being located within 'Central England', an area associated with the domination of large manorial estates, the distribution of property was quite egalitarian, as indicated by its Gini-index of 59 for the year 1279. In contrast to what was expected, the Bourn Valley was characterised by small, fragmented manors exploiting very small demesnes with a proliferation of small freeholders and free tenants. Data from the Florentine Catasto of 1427 showed the mountain region of the Casentino also to have had an equitable distribution of land between 1300 and 1580, largely down to the resilience of the peasant property structure over the long term. Although there was no quantitative data to calculate a Gini-index for the Casentino in the eleventh to thirteenth centuries, this case was also deemed to be egalitarian in property distribution because there is simply no way the landholding would have been more polarised than in the

period 1300-1580. In fact, the peasant property structure coupled with the subsistence-orientated agriculture probably would have made the Casentino even more equitable between 1000 and 1300 than in 1427.

In order to strengthen and support the Gini-index figures, which were (almost entirely) land distribution at the user-level, the results of the social distribution of landownership have also been provided below. As might be expected, those areas with more equitable distributions of land at the user-level (i.e. lower Gini-indexes), were societies that had high levels of local ownership over land; that is high levels of land owned by rural farmers and peasants. In contrast, regions with more polarised distributions of land (i.e. higher Gini-indexes), were societies with more land in the hands of absentee owners, such as urban institutions and burghers, or aristocrats. The only two places where a social distribution of landownership was not attempted was in the Casentino Valley for the period 1000 to 1300 (due to lack of sources), and in the Oldambt between 1750 and 1900 because of the blurring of the lines between owner and user. In this part of Groningen at the time, tenant farmers were almost considered actual legal owners of the land such was the strength of their property rights.

Table 8.1 Social distribution of landownership across all five case studies (%)

	Ascoli Satriano (1753)	**The Betuwe (1550)**	**Bourn Valley (1280)**	**The Betuwe (1300)**	**Locorotondo (1749)**[1063]	**East Chilford (1280)**	**Casentino Valley (1427)**	**The Oldambt (1721)**[1064]	**Florentine *Contado* (1427)**[1065]
Aristocracy	37	34	22	49	15	40	15	3	9
Ecclesiastical	56	26	12	12	30	10	35	13	21
Lay institutions[1066]	0	9	0	3	0	0	0	1	1
Urban	0	9	0	6	0	0	0	44[1067]	60
Local farmers	7	22	66	29	55	50	45	33	9

Sources: Caley & Illingworth (eds.), *RH*, ii, 420-30, 510-20, 562-4, 568-9; Ventura (ed.), *Onciario 1753*; ASB, 1749 Catasto Onciario di Locorotondo; GA, AMtB 2, 1170, no. 73; ASF, Catasto, nos. 179-81, 246, 250, 330; RAG, Staten van Stad en Lande, 1, no. 2143; van Bavel, 'Land, lease and agriculture', 14.

[1063] Although the Gini-index was from 1920, the only source that could give the social distribution of landownership in the period 1600-1900 was the Catasto Onciario from 1749.

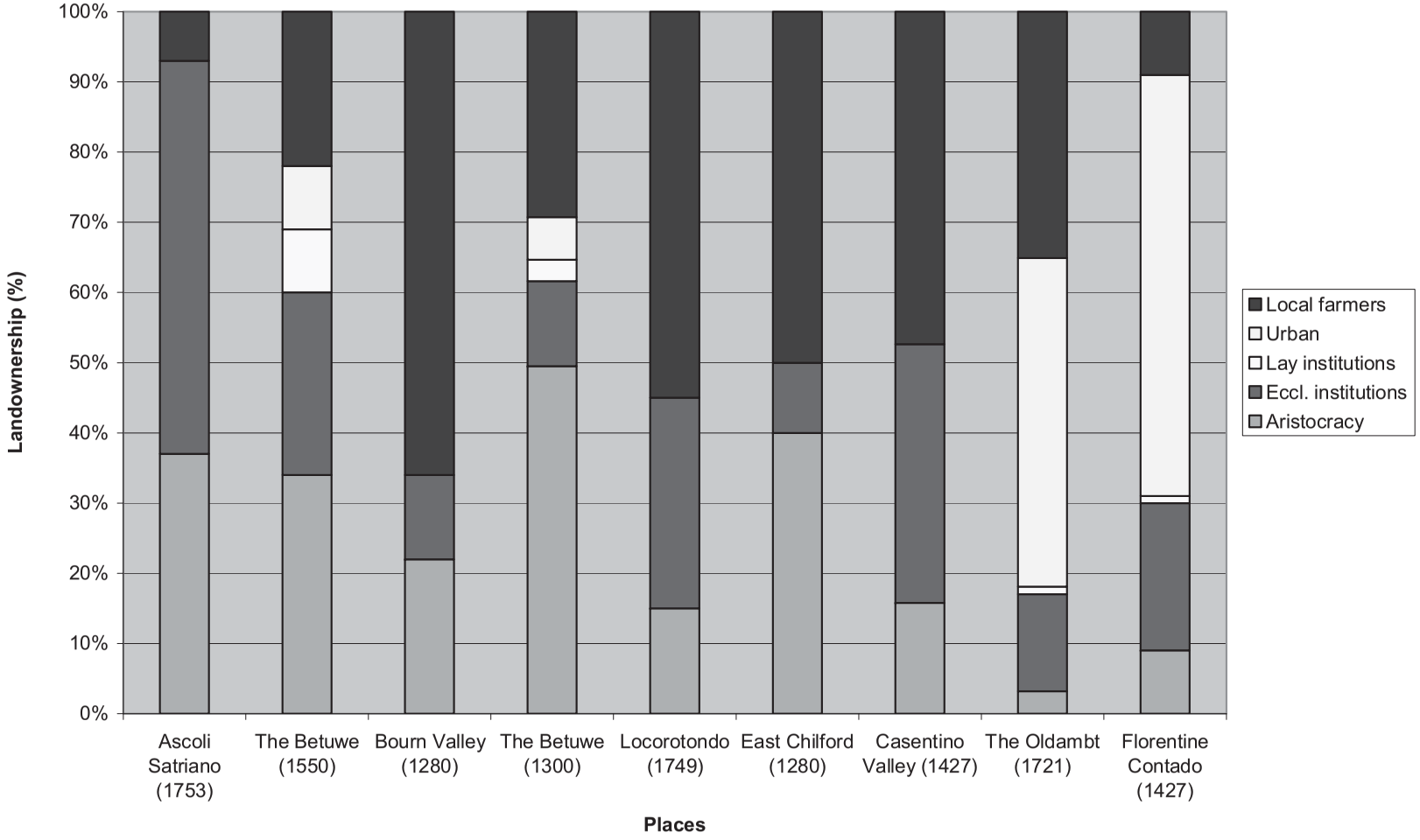
[1064] Although the Gini-index was from 1630, the only source that could give the social distribution of landownership in the period 1500-1750 was the *verponding* from 1721.

[1065] Rough estimates from the secondary literature. Herlihy & Klapisch-Zuber, *Tuscans*, 94; van Bavel, 'Markets for land, 513; Fiumi, *Storia*, 220; *Demografia, movimento urbanistico e classi sociali in Prato dall'età comunale ai tempi moderni* (Florence, 1968), 168; Epstein, 'Peasantries of Italy', 89.

[1066] The difficulty in distinguishing 'ecclesiastical' from 'lay' institutions has been emphasized in Rijpma, 'Funding public services', chp. 2.

[1067] The total landownership does not add up to 100 percent here because 8 percent of the land in the Oldambt belonged to 'Province' and 'Ommelanden' institutions, which were difficult to incorporate into the framework of the table.

Figure 8.2 Social distribution of landownership across all five case studies (%)



Sources: as above

The decision whether to classify the configuration of property as 'dynamic' or 'persistent' within a region was linked more to the conditions of property transfer rather than property distribution. How freely was land able to change hands in each case study? Four societies were considered to have had 'persistent' arrangements of property where there were major impediments to land transfer. In Ascoli Satriano, neither access to the land nor its social distribution had much chance of changing over the period 1600 to 1900. Even when the transhumant pastoral farming system managed by the Royal Customhouse of Naples disappeared, the land was publicly auctioned out to the same elite land barons. Ecclesiastical institutions and aristocrats (former feudal lords) directly exploited their estates themselves, thereby blocking any sort of emerging land or lease market. The Casentino Valley between 1000 and 1300 also had 'persistent' property. Although land theoretically could have changed hands as early as the eleventh century (land markets emerged early in central Italy) and tiny morsels were exchanged between peasants and donated to ecclesiastical institutions, there was absolutely no sign of inhabitants that had found ways of accumulating or consolidating landholdings. Similarly, land changed hands in the Bourn Valley in the late Middle Ages, but evidence only points to the tiniest of parcels. Any changes to the social distribution of landownership were limited by the presence of the open field system (which made it difficult to consolidate landholdings) and the lingering presence of direct demesne management. Finally, land probably did not change hands very much in the Betuwe between 1129 and 1350, with the exception of gifts to the ecclesiastical institutions and peasant expropriation by the likes of the abbey of Marienweerd. Certainly a lease market never took hold in the region till after 1350, and evidence has shown an entirely lacklustre land market – probably limited by all the overlapping jurisdictions and rights connected with the strong manorial system there.

Property transfer was more 'dynamic' in the areas where leasehold became dominant. In the late-medieval and early modern Betuwe, land went up for auction every few years, indicative of a fluid and flexible market in short-term leases. Land was also able to shift hands without too many problems in East Chilford between 1200 and 1400. Even by the late thirteenth century, manorial demesnes were being fragmented and sold or leased out to emerging groups of prosperous local peasants. Land transfer was also dynamic in Locorotondo and in the Oldambt, which is exemplified by the fact that in both areas the distribution of landholding changed over time. In Locorotondo, land was delivered into the hands of local peasants through emphyteusis, making the society more equitable. In the Oldambt, land

became over time consolidated into the hands of large tenant farmers, thanks in part to the increasing urban incursion and acquisition of property in the region. The only place where it was difficult to determine whether the property configuration was 'dynamic' or 'persistent' was the Casentino Valley between 1300 and 1580. In general the small farmer property structure remained firm (even into the nineteenth century), although there were some small pockets where land consolidation was being practiced among an emerging group of well-to-do farmers, who were in the process monopolising local offices and had grown rich off the wool trade.

Table 8.2 Results for the configuration of 'property' for each society identified

	Egalitarian-Polarised	**Dynamic-Persistent**	**Page ref.**
Casentino Valley (1000-1300)	1	0	Wickham, *Mountains*
Casentino Valley (1300-1500)	1	0.5	100-5
Bourn Valley (1200-1400)	1	0	147-52
East Chilford (1200-1400)	0	1	147-52
Betuwe (1129-1350)	0	0	193-8
Betuwe (1350-1650)	0	1	193-8
Oldambt (1500-1750)	1	1	216-20
Oldambt (1750-1900)	0	1	221-30
Ascoli Satriano (1600-1900)	0	0	263-9
Locorotondo (1600-1900)	1	1	263-9
Florentine contado (1300-1580)	0	1	100-5

B: Power

Egalitarian configurations of power characterised those pre-industrial societies which knew great freedoms: extra-economic exactions were low or absent, jurisdictional control and coercion was minimal, and potential interest groups lacked the tools to perpetuate their power. Five of the societies were deemed to have been more or less free from domination and repression. The farmers of the Oldambt between 1500 and 1750 were very independent and free, and indeed were referred to in the late seventeenth century as a 'farmers' republic'. They displayed high levels of self-awareness of their own identity, and high levels of autonomy – especially in the face of perceived urban infringements on their liberties. Locorotondo was also quite egalitarian in its power structures, largely down to the inherent weaknesses of the feudal lords who were unable to establish a pattern of latifundist agriculture as seen elsewhere in Southern Italy and were not even able to keep control of their emphyteutic leases – which they ended up losing to their tenants. East Chilford was also quite a free society. Manorial lords were not powerful here and lost their position early (and definitely early for England), demesnes were fragmented and leased out early, there were high amounts of 'free tenants', and nearly all onerous labour obligations had been commuted to standard cash rents by the late thirteenth century. Finally, the Casentino in both periods was non-hierarchical; interesting given its reputation as a long-lingering 'feudal enclave'. Labour works and demesnes did continue up to the sixteenth century in restricted areas, but the obligations and services asked of the tenants was more symbolic than onerous. Villages had much room to decide about the management and regulation of their own forest resources. Furthermore, even after submitting to Florentine administration in the fourteenth and fifteenth centuries, most of the village communities secured favourable concessions, and more to the point, were hardly repressed in the same way as settlements in the Florentine *contado*.

Five societies, in contrast, were recognised as having more polarised distributions of power where dominant groups used whatever tools necessary to maintain a hold over the rest of the population. The Betuwe had a long tradition of coercion and restricted freedoms. From as early as the Merovingian period, more land was brought into cultivation under a strong manorial system employing serf labour. Although serfdom disappeared by the fourteenth century, there was little growth in horizontal associations or institutions from the bottom up. Indeed, the

villages of the Betuwe stayed very weak, and arguably became even weaker in the late-medieval and early modern period, when the society became characterised by a minority of successful tenant farmers and a host of agricultural labourers. Ascoli Satriano also had very skewed distributions of power, linked in part to the entrenched property structures. It would be very difficult to find in the sources any sign of growth in civic institutions, unions, or formalized opposition to the elite landowners (who became latifundists in the nineteenth century). Furthermore, the City of Naples' relationship with Ascoli Satriano was largely exploitative, basically formulating strict regulations on the pastoral-arable balance on the Tavoliere, in order to reap the benefits from whatever agricultural products were needed. It is unsurprising to say that the Florentine *contado* between 1300 and 1580 was entirely dominated through coercive and often harsh jurisdictions from the city of Florence. Finally, the Oldambt after 1750 also displayed high polarisation in the distribution of power – interesting because the sixteenth and seventeenth centuries were referred to as the age of the 'farmers' republic'. By the late nineteenth century, many of the important local political positions were dominated by the so-called 'gentleman farmers'. Polarisation came to such a head by the twentieth century, that agricultural labourers pursued more radical (often socialist) politics, culminating in the strikes of 1929 and some tragic stories of starvation and death.

'Persistent' power structures applied to those societies where the balance of power was very difficult to shift. Five places were found to have had continuity in the distribution of power. The Betuwe showed great continuity in the polarised distribution of power (continued through both the 1129-1350 and 1350-1650 periods). Even with the decline of formalised manorialism and serfdom by the end of the thirteenth century, former manorial lords and ecclesiastical institutions retained their power through the late Middle Ages. Indeed, the Black Death did not bring any kind of peasant freedom and there was little challenge from urban burghers or institutions here. The Bourn Valley also showed continuity in the power structures. Manorial lords continued to exploit their same demesnes after the Black Death, and no groups (either from below or urban) challenged the balance. In Ascoli, the same power imbalance was perpetuated for many centuries, even after feudalism had become anachronistic. Former feudal lords reinforced their power through consolidation of their large estates, and later in the nineteenth century, violent subjugation of agricultural workers. Finally, although manorialism and serfdom disappeared very early from the Florentine *contado*, the distribution of power did not change very much over the late Middle Ages. Indeed, urban authorities continued to perpetuate their dominance over their hinterlands because (a) the rural aristocracy

had never been particularly strong in this part of Tuscany and (b) there was absolutely no rural opposition to urban interests. In fact, rural aristocrats and urban magnates were often indistinguishable and rural and urban interest groups often one and the same.

The power balance in the other societies was far more changeable. The Casentino Valley between 1000 and 1300 was marked by a constant battle between a wide range of interest groups including the Bishop of Arezzo, local signorial lords such as the Guidi and Ubertini, ecclesiastical institutions such as Strumi, Vallombrosa, Camaldoli, and Prataglia, local *pievi* and churches, and the village communities. In the late Middle Ages, some of these groups lost their powers a little, such as the Bishop of Arezzo, lay aristocrats such as the Guidi (fragmented into four warring factions), and Prataglia (amalgamated with Camaldoli), but this has to be countered with the emerging territorial ambitions of the Florentine State. No one interest group had control of the valley. In the Oldambt, clashes between the local farmers and the institutions of the city of Groningen were fierce from the seventeenth century onwards, although the city had actually tried to uphold jurisdictions over the Oldambt from the fifteenth century. Not only did local farmers revolt against perceived urban infringements (new jurisdictions and the building of new canals), but there was also a certain political antagonism between *nouveau riche* urbanites from Groningen who had invested large amounts of capital in polder reclamation in the Dollard, and wealthy local farmers who also wanted political connections and offices. Locorotondo also was characterised by a clash of power interests. In the seventeenth century, the feudal lords probably still held sway to a certain extent, but from the eighteenth century feudal lords not only saw their extra-economic jurisdictions fall away, but were challenged at a local level by municipal authorities (*università*) who started to back the town and country folk of Locorotondo instead. The only place difficult to classify was East Chilford between 1200 and 1400. In some ways there was change during the late thirteenth century as manorial lords began to be challenged economically by an upcoming group of wealthy tenants, though it was unclear whether they wielded any real political or jurisdictional power in the area.

Table 8.3 Results for the configuration of 'power' for each society identified

	Egalitarian-Polarised	Dynamic-Persistent	Page ref.
Casentino Valley (1000-1300)	1	1	Wickham, *Mountains*
Casentino Valley (1300-1500)	1	1	119-22
Bourn Valley (1200-1400)	0.5	0	152-8
East Chilford (1200-1400)	1	0.5	152-8
Betuwe (1129-1350)	0	0	198-201
Betuwe (1350-1650)	0	0	198-201
Oldambt (1500-1750)	1	1	214-5, 238-9
Oldambt (1750-1900)	0	1	225-6
Ascoli Satriano (1600-1900)	0	0	278-81
Locorotondo (1600-1900)	1	1	278-81
Florentine contado (1300-1580)	0	0	119-22

C: Commodity markets

Egalitarian marketing frameworks for commodities were not dominated by powerful interest groups – access was unrestricted and exclusive privileges minimal. Four societies conformed to that definition. Many parts of Groningen province, perhaps from as early as the thirteenth century though certainly by the sixteenth century, were subject to the *stapelrecht* – an urban monopoly which dictated that according to jurisdiction, certain regions had to bring their produce to the city of Groningen first, before sale. The Oldambt, however, from a very early date had always asserted its independence from Groningen jurisdictions – and indeed claimed that it was never subject to the *stapelrecht* in the same way the Ommelanden was. The Betuwe in both periods also seemed to have been able to use unrestricted markets. Especially in the late Middle Ages and early modern period when the large commercialised farms

began to proliferate, tenant farmers used the rivers to market their produce in the urban centres of Holland, which were renowned for their lack of restrictions and openness to outside mercantile interests. The information on markets at Locorotondo is patchy, however, it has been suggested that the proliferation of vineyards in the region was supported by an international market in wine, which were shipped from the nearby ports of Monopoli and Bari. There is nothing to suggest that producers were excluded from these.

The only two societies which had to deal with restrictive and coercive pressure on their marketing frameworks were Ascoli Satriano and the Florentine *contado*. The Naples administration had always given favour and concessions to large landowners on the plains of the Tavoliere, as long as the producers stuck to the principles of the pastoral farming system managed by the Royal Customhouse and that they marketed their surplus towards the large city of Naples. The relationship between Florence and the *contado* was one of the truly classic coercive marketing frameworks. Sharecroppers were supported by urban investment from urban landowners, and as such, were forced to take whatever share of the surplus not used for subsistence to the city of Florence. In fact, some sharecroppers were actually coerced into physically bringing the goods to the gates themselves, and paying the subsequent tolls.

There were a few 'in-between' cases. While there was no one dominant force trying to push all goods into one market in the Casentino between 1000 and 1300, it is clear that the local marketing opportunities in the villages were managed by signorial lords who expected certain tolls. Some village markets were actually set up by signorial lords through concessions in order to stimulate trade. The late-medieval Casentino faced more obvious restrictions, such as the refusal of the Prato and Florentine guilds to allow the marketing of Casentinese cloth within their cities. However, there is plentiful evidence which shows merchants from the Casentino, deliberately flouting these restrictions which were not well enforced. East Chilford and the Bourn Valley were similar to the Casentino in the high Middle Ages. There was no dominant force pushing goods into one market and indeed, the city of Cambridge entirely lacked coercive control and jurisdictions over its rural hinterlands between 1200 and 1400. However, the small market town of Linton (a key market for East Chilford) was stimulated through burgage tenure granted by manorial lords. The village markets in the Bourn Valley were granted by manorial lords.

While the decision to assess commodity markets as egalitarian or polarised was based on the extent to which they were dominated or manipulated by interest groups, the dynamic-persistent opposition was about access to markets. In dynamic marketing frameworks, there were a number of different marketing options

(regardless of whether they were manipulated by elite groups or not). Most of the case studies contained societies with a wide choice of options for the trade of goods. Locorotondo was close to a number of different ports where vines and olives were taken to international markets; importance of which grew in the late nineteenth century when the French wine trade went into crisis. Producers in the Oldambt, which had always refused to bring their surplus solely to Groningen, focused their trade initially towards the cities of the Westfalen such as Emmen and Bremen, and later the commercialised farms sent their grain to Amsterdam. Similarly, while the commercialised farms of the late-medieval and early modern Betuwe could not exploit many good urban markets very close by (the Dutch river area was not particularly urbanised), produce was easily transported to the multiple urban markets of Holland, which fuelled urbanisation there. Producers in the two Cambridgeshire regions had access to a number of different markets. Unpredictable markets and fairs took place on a local village level, while Bourn Valley was walking distance away from the larger market of Cambridge, and the market town of Linton was easily reachable for producers in East Chilford. The excellent water links between Cambridge and the South-East, however, meant that the grain estates in Bourn Valley could also supply the towns of East Anglia such as Norwich, and the massive urban demand of London. Finally, although the late-medieval Casentino began to cater commercialised production towards the emergent urban market of Florence, there is much evidence that mountain producers also found willing traders in Arezzo (for leather), in Prato (to the annoyance of the guilds), and as far away as Bologna. Local markets also developed in the small local towns of Bibbiena and Poppi, and the small village trade also sprung up in the late Middle Ages in Pratovecchio, Stia, and Marciano, as a result of the buoyant pastoral economy.

Some of the societies had much fewer options to market commodities, and with very few new marketing opportunities emerging. The difficult passage through the mountain passes, the poor state of the roads, and the isolated location of the Casentino in the eleventh and twelfth centuries meant that notwithstanding some small local village markets at Soci and Marciano, trade locations were limited with the exception of Arezzo to the south. Marketing at Ascoli Satriano was also limited, although admittedly not much is known about pre-industrial markets in Apulia. From the limited evidence, however, it seems the trading venue for producers in the Ascoli territory was the large urban market at Naples – partly down to the fact the great Tavoliere plains of Northern Apulia were rigorously managed from above. Ascoli was on the main trade route to Naples though the journey through the mountainous Basilicata was fraught was difficulties. The options for producers in the Florentine

contado were the most limited. As sharecropping began to proliferate, concentrated villages broke down, leaving them with no local marketing functions. Furthermore, as Florence decided in the late Middle Ages to entirely subdue the other towns such as Prato, Pisa, Pistoia, and San Gimignano, within its territory, this potential marketing opportunity was severely limited. Finally, the marketing options for the Betuwe between 1129 and 1350 were also curtailed. Tiel was probably an important source of urban demand in the eleventh century (and Dorestad before that), but had completely declined by the high Middle Ages leaving very few urban outlets nearby. We know very little of local village markets in this region in the early and high Middle Ages. Furthermore, while the commercial farmers of the early modern period could focus their production towards the urbanised regions of Holland in the sixteenth century, between 1129 and 1350, Holland was barely even fully reclaimed from the marshes, let alone serving as a decent source of urban demand.

Table 8.4 Results for the configuration of 'commodity markets' for each society identified

	Egalitarian-Polarised	**Dynamic-Persistent**	**Page ref.**
Casentino Valley (1000-1300)	0.5	0	Wickham, *Mountains*
Casentino Valley (1300-1500)	0.5	1	92, 98-9, 112-5, 117
Bourn Valley (1200-1400)	0.5	1	159-60
East Chilford (1200-1400)	0.5	1	160-1
Betuwe (1129-1350)	1	0	183-4
Betuwe (1350-1650)	1	1	183-4
Oldambt (1500-1750)	1	1	238-9
Oldambt (1750-1900)	1	1	231-2
Ascoli Satriano (1600-1900)	0	0	276-7
Locorotondo (1600-1900)	1	1	Galt, *Far from the church*
Florentine contado (1300-1580)	0	0	107

D: Modes of exploitation

Egalitarian modes of exploitation characterised those pre-industrial societies which were arranged to allow a wide section of society profit from production. Producers could hold onto their surplus and the amount given away to social superiors or elites was minimal. Three societies conformed to this definition. By the late Middle Ages in the Casentino, most of the light extra-economic obligations had disappeared, and evidence actually shows that lay signorial lords and the Florentine administration offered rural people concessions and privileges such as tax exemptions, as a way of keeping them onside. Regarding relationship to the land, most peasants had full control over their scattered plots. The conditions of land reclamation in the Oldambt gave the peasant farmers great control and strong rights over their own land there, and almost certainly were able to profit from the entire surplus they produced due to their independence from Groningen and the lack of rural nobility in the region. Finally, the peasants of Locorotondo also widely benefited from the particular arrangement of modes of exploitation in the region. Early peasant colonisation of the woodlands had given the peasants a firm property base in opposition to the feudal lords, and furthermore, the proliferation of the emphyteutic lease gave an even greater proportion of society access to the means of production and to forge their own existence.

More societies had polarised modes of exploitation, however, which benefited one or a restricted few interest groups, often to the detriment of the rest of society. In the Bourn Valley manorialised demesne agriculture lingered on until the fifteenth century and supported the old rural elite of signorial lords. The same situation existed in the Betuwe between 1129 and 1350. It was a heavily manorialised economy, where lay lords and ecclesiastical institutions imposed extra-economic conditions on their serfs, in order to secure the labour to work their demesnes. The Betuwe in the late-medieval and early modern periods also displayed polarised modes of exploitation, though by this time they were indirect. The short-term lease system was eventually exploited by a group of large tenant farmers who consolidated all of the lease land in their own hands, where the only rule of the game was outbidding less fortunate farmers at public auctions. In the Oldambt, the same polarised exploitation system prevailed. Those large farmers who secured and crystallised their hold over large landholdings through *beklemrecht* (long-term hereditary leasehold) grew prosperous through the labour of (eventually) impoverished agricultural labourers. In East Chilford, the manorial system and labour obligations were on the wane by the

second half of the thirteenth century, and thus rural peasants in theory should have benefited from being able to take up pieces of former demesne by purchase or lease; however, it became clear that these opportunities were dominated by a select group of successful local tenants – to the detriment of the unfortunate rest. In Ascoli, the direct exploitation of capital-intensive pastoral farms by large (often absentee) landowners in the eighteenth century did not support high levels of agricultural employment, while the latifundist grain farms of the late nineteenth century operated on the rationale of over-exploiting the high labour supply to maintain control over the workers and pay very miserly wages. Finally, in the Florentine *contado* between 1300 and 1530, in the absence of serfdom and a low labour supply, wealthy Florentine burghers used the mal-functioning of the factor markets (also poor supply of credit and capital) to install a system of sharecropping which entrenched urban dominance over rural producers. The only place which was difficult to assess as either egalitarian or polarised in its arrangement of modes of exploitation was the Casentino Valley between 1000 and 1300. Indeed, inhabitants of the rural communities often had to offer customary works on demesnes, though at the same time these were not burdensome and demesnes were small anyway.

Dynamic modes of exploitation were those which displayed high tenurial flexibility, and production could quickly switch from direct management to indirect exploitation. Five of the societies conformed to this definition. In the late-medieval Casentino, tenancies were extremely flexible in contrast to the perception of Central Italian mountain regions being places dominated by tradition and conservatism. Indeed, ancient tenancies co-existed alongside newer rents paid in cash or kind. Institutions such as the monastery of Camaldoli were able to quickly shift from direct farming to indirect exploitation and back again very quickly. In East Chilford, manorial demesnes fragmented early and while some were sold-off or sub-infeudated, others were leased out to local tenants. A characteristic feature of the late-medieval Betuwe was the speed and thoroughness of the transition from direct demesne management through the manorial system, to a system of short-term leasing where land was transferred frequently between parties. The modes of exploitation in the Oldambt between 1500 and 1750 may also be seen as quite dynamic. Initially land was either owned outright by peasant farmers, or leased out on short or medium term contracts. However, by the beginning of the eighteenth century, this came to be replaced by a new mode of exploitation whereby rural farmers would sell their lands (often to urban institutions or burghers) and then take them up through *beklemrecht* as long-term tenants. Finally, the Locorotondo also showed great flexibility in exploitation. Initially in the seventeenth century there

seems to have been a co-existent of peasant property ownership and feudal exploitation of estates and in particular woodland estates. However, the eighteenth century this all changed with the emergence of emphyteutic leasing, and to a lesser extent improvement contracts.

Other societies had less adaptable modes of exploitation. The manorial lords of the Bourn Valley did not change from direct management of their estates until the fifteenth century – indeed the Black Death did nothing to stop this practice as found elsewhere in England. The manorial mode of exploitation was also very stable in the Betuwe and actually continued in limited form right up to the mid fourteenth century. Indeed, the intriguing aspect of short-term leasehold in the region was that it emerged very late (in comparison to Holland) but immediately became important. In the Oldambt, once *beklemrecht* took hold after 1750, it was very inflexible and very difficult to shift. Indeed, the whole premise behind the hereditary lease was that it was long-term, and crystallised the connection between owner and tenant, and tenant, farmhouse, and land. It stopped farms being broken up, and ensured farms stayed in the same farming families' hands. Finally, Ascoli was displayed great continuity in the modes of exploitation. While the economic activity shifted from capital intensive pastoral farming to *latifundia*, and there developed some commercial or industrial opportunity in the town itself, the means of production stayed in the same hands over the long-term, and the owners of the land remained dedicated to direct exploitation. Two of the societies were more difficult to assess in such black or white terms as dynamism and continuity. Certainly there were more tenancies based on ancient rents in the Casentino between the eleventh and thirteenth centuries than after 1300. However, at the same time, there was a diversity in the range of tenancies – some based on labour obligations and some on notions of fidelity to a particular lordship, but others were for cash and in kind and more based on market value of the land. The Florentine *contado* also had an intermediate status. The flexible part of the sharecropping contracts was that family sizes and more frequently the sizes and layouts of farms in the landscape could be easily re-arranged by urban landlords, yet at the same time sharecropping remained inflexible in the way it gave little option for rural people in the *contado* to make a living outside the sharecropping farm.

Table 8.5 Results for the configuration of 'modes of exploitation' for each society identified

	Egalitarian-Polarised	**Dynamic-Persistent**	**Page ref.**
Casentino Valley (1000-1300)	0.5	0.5	110-1, 117
Casentino Valley (1300-1500)	1	1	105-18
Bourn Valley (1200-1400)	0	0	143-7
East Chilford (1200-1400)	0	1	143-7
Betuwe (1129-1350)	0	0	192-3
Betuwe (1350-1650)	0	1	176-84
Oldambt (1500-1750)	1	1	214-20
Oldambt (1750-1900)	0	0	230-40, 245-53
Ascoli Satriano (1600-1900)	0	0	269-78
Locorotondo (1600-1900)	1	1	269-78
Florentine contado (1300-1580)	0	0.5	105-18

8.2 What 'types of pre-industrial societies' were the case studies?

Table 8.6 What type of society was the Casentino Valley, 1000-1300?

	Egalitarian-Polarised	**Dynamic-Persistent**
Property	1	0
Power	1	1
Commodity markets	0.5	0
Modes of exploitation	0.5	0.5
Total scores	**0.75**	**0.38**

Type of society: egalitarian-persistent

Table 8.7 What type of society was the Casentino Valley, 1300-1580?

	Egalitarian-Polarised	**Dynamic-Persistent**
Property	1	0.5
Power	1	1
Commodity markets	0.5	1
Modes of exploitation	1	1
Total scores	**0.88**	**0.88**

Type of society: egalitarian-dynamic

Table 8.8 What type of society was the Bourn Valley, 1200-1400?

	Egalitarian-Polarised	**Dynamic-Persistent**
Property	1	0
Power	0.5	0
Commodity markets	0.5	1
Modes of exploitation	0	0
Total scores	**0.5**	**0.25**

Type of society: polarised-persistent **or** egalitarian-persistent

Table 8.9 What type of society was East Chilford, 1200-1400?

	Egalitarian-Polarised	**Dynamic-Persistent**
Property	0	1
Power	1	0.5
Commodity markets	0.5	1
Modes of exploitation	0	1
Total scores	**0.38**	**0.88**

Type of society: polarised-dynamic

Table 8.10 What type of society was the Betuwe, 1129-1350?

	Egalitarian-Polarised	**Dynamic-Persistent**
Property	0	0
Power	0	0
Commodity markets	1	0
Modes of exploitation	0	0
Total scores	**0.25**	**0**

Type of society: polarised-persistent

Table 8.11 What type of society was the Betuwe, 1350-1650?

	Egalitarian-Polarised	**Dynamic-Persistent**
Property	0	1
Power	0	0
Commodity markets	1	1
Modes of exploitation	0	1
Total scores	**0.25**	**0.75**

Type of society: polarised-dynamic

Table 8.12 What type of society was the Oldambt, 1500-1750?

	Egalitarian-Polarised	**Dynamic-Persistent**
Property	1	1
Power	1	1
Commodity markets	1	1
Modes of exploitation	1	1
Total scores	**1**	**1**

Type of society: egalitarian-dynamic

Table 8.13 What type of society was the Oldambt, 1750-1900?

	Egalitarian-Polarised	**Dynamic-Persistent**
Property	0	1
Power	0	1
Commodity markets	1	1
Modes of exploitation	0	0
Total scores	**0.25**	**0.75**

Type of society: polarised-dynamic

Table 8.14 What type of society was Ascoli Satriano, 1600-1900?

	Egalitarian-Polarised	**Dynamic-Persistent**
Property	0	0
Power	0	0
Commodity markets	0	0
Modes of exploitation	0	0
Total scores	**0**	**0**

Type of society: polarised-persistent

Table 8.15 What type of society was Locorotondo, 1600-1900?

	Egalitarian-Polarised	**Dynamic-Persistent**
Property	1	1
Power	1	1
Commodity markets	1	1
Modes of exploitation	1	1
Total scores	**1**	**1**

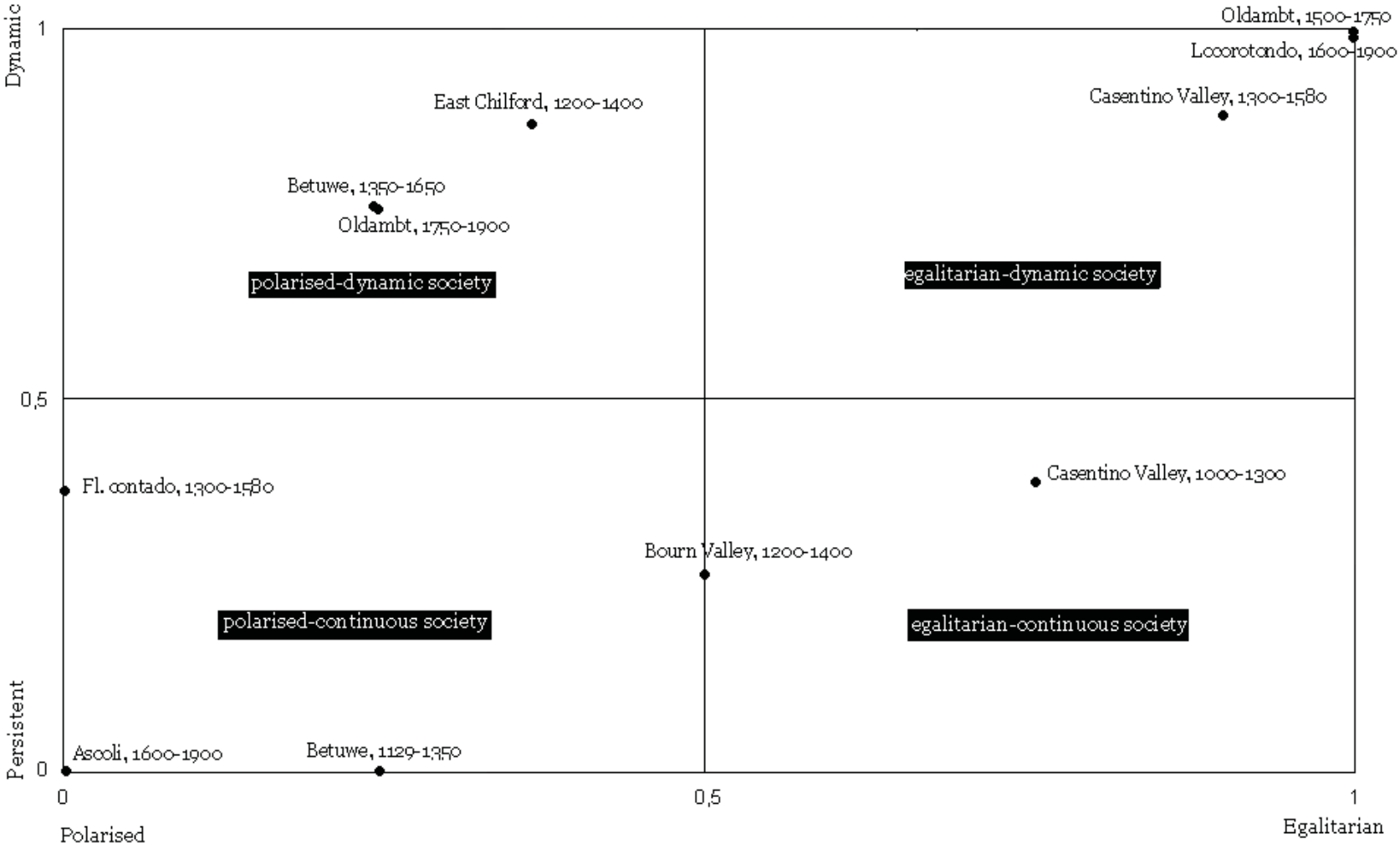
Type of society: egalitarian-dynamic

Table 8.16 What type of society was the Florentine *contado*, 1300-1580?

	Egalitarian-Polarised	**Dynamic-Persistent**
Property	0	1
Power	0	0
Commodity markets	0	0
Modes of exploitation	0	0.5
Total scores	**0**	**0.38**

Type of society: polarised-persistent

Figure 8.3 A comparative overview of all the 'types of societies' found in the case studies



8.3 Predicted strategies for resource management and settlement development in line with the hypothesis laid out in chapter two

In chapter two, a framework was constructed which built up an hypothesis which stated that in the pre-industrial period, there may have been a connection between different 'types of societies' and whether human settlements were resilient and stable over the long-term (perhaps in the face of crises) or vulnerable to crisis leading to decline or even collapse. To recap, the 'egalitarian-persistent' societies exploited their resources using protectionist strategies with one eye on risk avoidance and risk management. As a result, they produced very resilient settlements over the long-term, particularly in the face of exogenous crises such as harvest failures and pestilences, though possibly did not change much. The 'polarised-dynamic' societies exploited their resources using short-termist strategies with the intention of interest groups reaping as much as they possibly could from finite resources, but at the same time exposing the wider population to more risk. As a result, they produced settlements which possibly could rise up quickly through short-term economic gain, but were also susceptible to rapid decline – maybe total collapse. The 'egalitarian-dynamic' societies exploited their resources flexibly by responding to change – often taking production in new directions. As a result, they produced adaptable settlements which could grow organically and furthermore got their resilience from the inherent adaptability of society. Finally, 'polarised-persistent' societies tended to exploit their resources using repression and enforced restriction. As a result, they produced entirely dependent settlements which could potentially benefit from structures necessary for long-term resilience (laid down through coercion), but at the same time faced inbuilt restrictions on decision-making processes, which could lead to a failure to adapt to new conditions, and thus exposure to settlement decline or collapse. These were then 'moderately vulnerable' instead of 'highly vulnerable'.

Table 8.17 The hypothesized link between societies, strategies for managing resources, and settlement

Type of society	Strategies for managing resources	Settlement consequences
Egalitarian-persistent	Protectionist or risk-avoidance	Resilient and stable settlement
Polarised-dynamic	Short-termist	Highly vulnerable settlement
Egalitarian-dynamic	Flexible	Resilient and adaptable settlement
Polarised-persistent	Restrictive-coercive	Moderately vulnerable settlement

Figure 8.4 Predicted strategies for resource management in all the case studies

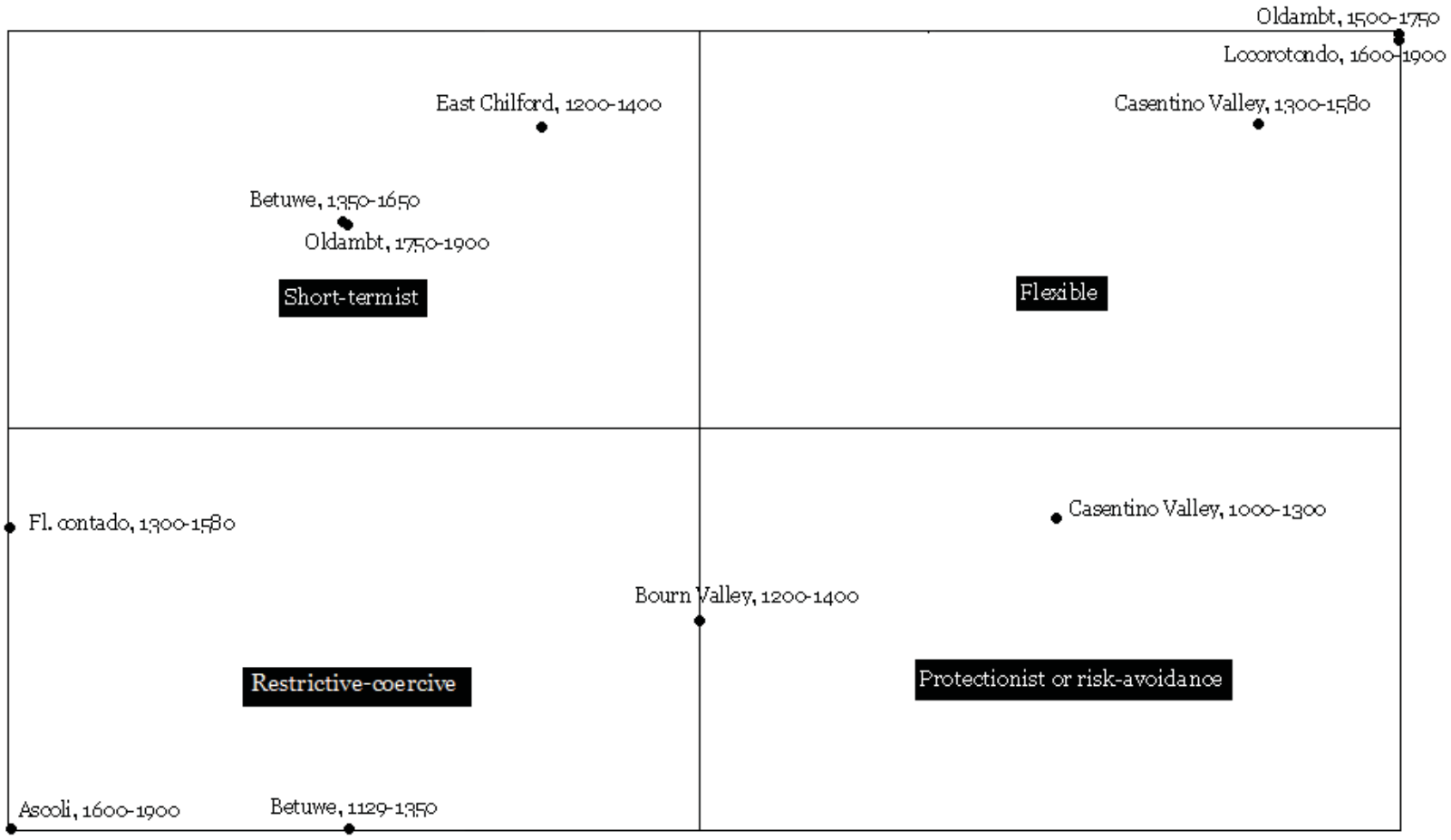
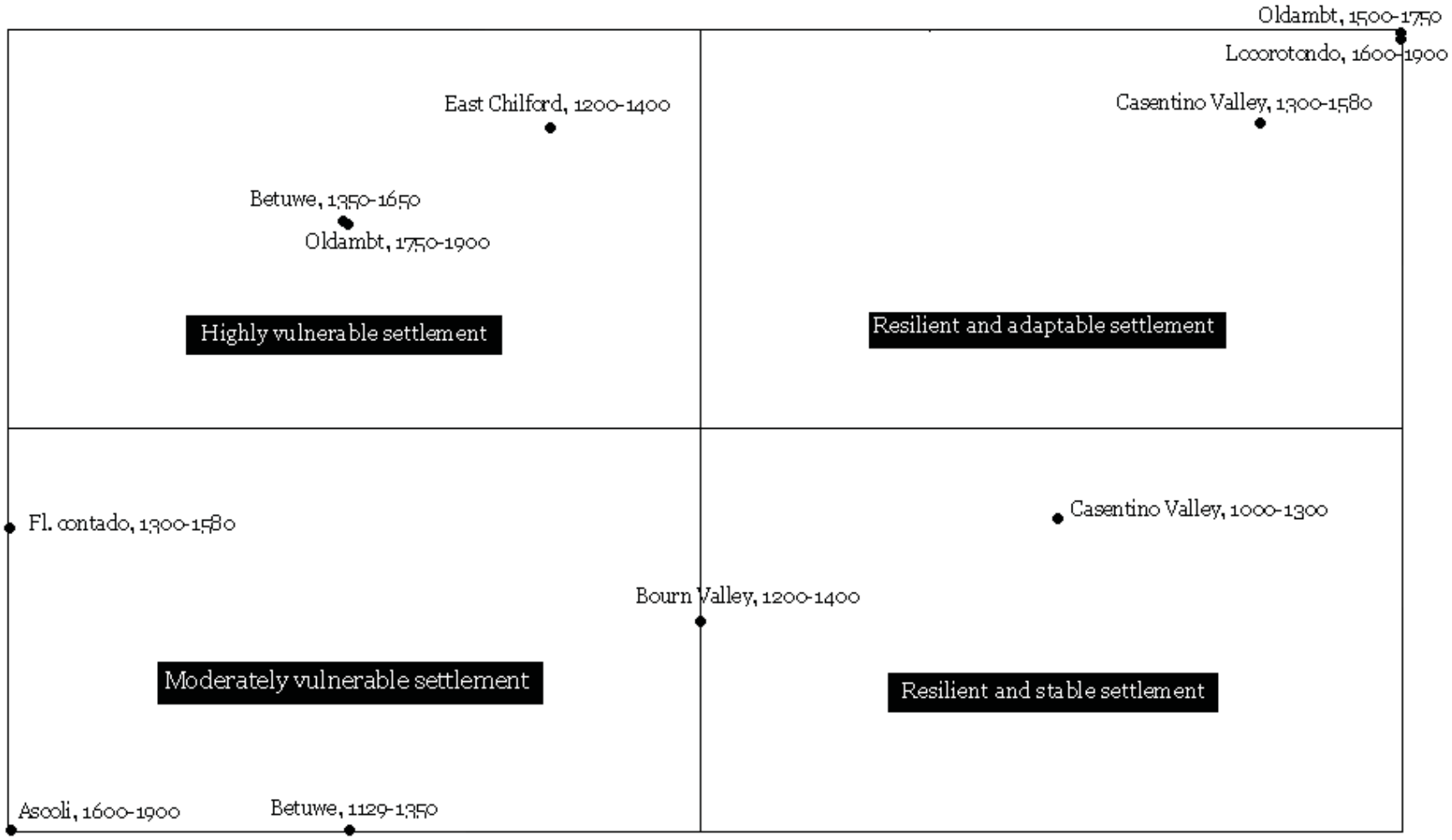


Figure 8.5 Predicted settlement consequences for all the case studies: resilient or vulnerable?



8.4 Actual strategies for managing resources and settlement development shown by the empirical research: testing the hypothesis

A: The Casentino Valley, 1000-1300 – egalitarian-persistent society

	Predicted results	Actual results
Strategies for managing resources	Protectionist or risk-avoidance	Protectionist or risk-avoidance
Settlement development	Resilient and stable	Resilient and stable

Although powerful interest groups did exist in the Casentino Valley between 1000 and 1300 such as the monastery of Camaldoli and lay signorial lords, they did overly repress or dominate the rural inhabitants, and were found in many instances negotiating with the local communities over the management of resources. As a result, peasant producers had room to devise strategies for exploiting the mountain resources which protected themselves and shared or limited risk. These strategies, in turn, gave settlements resilience and stability over the long-term.

Naturally in a mountain environment, an open field system played no role here, but plots were still scattered across the landscape (often some distances from each other), which acted against harvest failure. More important, however, was the protection of the forest resources through a system of common rights. Explicit demands from the thirteenth century have been found (although the commons already existed much earlier than this), urging inhabitants and institutions not to cut-down the trees for personal or private gain. In a region where arable cultivation was of reduced significance, very little clearance or colonisation of the forest was made in the high Middle Ages – the forest was of high value to monasteries, lay lords, and local communities in the Casentino. In the absence of obvious urban markets (Florence only had a population of 10,000 at the end of the twelfth century, but by 1300 had grown eleven-fold), peasants followed a subsistence economy, and limited their risks by pursuing a diverse range of activities. Peasant households practiced a mixed pattern of cultivation and small-scale pastoral farming (often pigs rather than sheep or cattle which are more associated with commercial pursuits), small amounts of wine and cheese was produced, but mountain-dwellers were most reliant on the consumption of chestnuts from the forest, which were high and protein and were vital in times of bread-scarcity.

As a result of the risk-avoidance strategies, settlement was very stable between the eleventh and thirteenth centuries. In fact, any change at all in the

settlement structure was very hard to enact in the Casentino Valley. Despite the proliferation of castles across the region in this period (incastellamento), built by territorial and lay signorial lords, this had no effect on the development of settlement. Thus, castles acted as symbols of political power and territorial crystallisation in the Casentino, but significantly they tended to be mere isolated aristocratic residences, but they rarely became population centres and their demographic effects were negligible. In any case, the lords were not powerful enough or did not have enough control over their castelli (fragmented jurisdictions) to be able to force people into concentrated settlements. Thus, hardly any change was made to the settlement structure in the Casentino Valley before 1300.

B: The Casentino Valley, 1300-1580 – egalitarian-dynamic society

	Predicted results	**Actual results**
Strategies for managing resources	Flexible	Flexible
Settlement development	Resilient and adaptable	Resilient and adaptable

By the late Middle Ages, the inhabitants of the Casentino Valley had to face up to changing economic conditions. This constituted the emergence of the city of Florence as a large urban market with great demand for produce. Settlement in other parts of Tuscany was decimated with the increased contact between city and its hinterlands after 1300. For example, Florentine encroachment into its rural *contado* had caused a wave of impoverishment in the countryside, prompting mass rural-urban migration from the fourteenth century onwards. However, this did not happen in the Casentino Valley.

It appears that the egalitarian and dynamic configuration of late-medieval society in the Casentino meant that inhabitants were able to adapt to exogenous changes such as the emergence of new urban markets. On a regional level, the total range and number of economic activities widened (exploiting natural resources in new ways), while on an individual producer or household level, production became more specialised and commercialised. This is a classic example of 'flexible' strategies for managing resources being put into action. Without going into too much detail (the process is reconstructed in chapter four), a new commercialised pastoral economy emerged after 1300, which stimulated in turn local cloth production. Furthermore, a timber trade, leather production, trout-fishing, honey and wine production, all were activities focused upon emerging demand in Florence. Some proto-industry also developed in the region including iron-production, where the foundries benefited

from the fast-running water and mills which were dotted along the Arno River. In turn, this stimulated other local trades in manufacturing produce out of iron, and charcoal burning, as the fuel needed for the operation of the mills.

As a result, settlement in the Casentino Valley in the late Middle Ages was resilient and adaptable. The change in settlement pattern has been traced using manuscript sources. The adaptation in the use and management of the local resources where production was re-arranged and re-focused towards urban commercial demand led to the crystallisation of settlement from previously dispersed farms into a network of coherent concentrated villages after 1300, all centred around points of production and local markets. As well as adapting in form in line with the flexibility in resource management, the settlements also appear to have been very resilient in the face of crisis. Although the Black Death undoubtedly reduced the populations of the Casentinese settlements after 1350, the populations were quick to recover. From the beginning of the fifteenth century to the midpoint of the sixteenth century, the population of the Casentino increased by more than a third. Furthermore, there were very few cases in the late Middle Ages of settlements disappearing. Most of the settlements mentioned in a census from 1552 were identifiable in the 1427 Catasto, and a significant number identifiable in the charters of the monastery of Camaldoli between 1006 and 1246.

C: The Bourn Valley, 1200-1400 – polarised-persistent society

	Predicted results	**Actual results**
Strategies for managing resources	Restrictive-coercive **or** Protectionist or risk-avoidance	Restrictive-coercive **or** Protectionist or risk-avoidance
Settlement development	Moderately vulnerable **or** Resilient and stable	Moderately vulnerable

The Bourn Valley threw up some methodological problems with the framework in the fact that it had some configurations within its society that could have been categorised as 'egalitarian' but others were more polarised. Accordingly, it received a score of 0.5 for the 'egalitarian-polarised' opposition, thus placing it on the edge of two resource-management strategies. This need not be a problem, however. It is clear that in the Bourn Valley, some structures were laid down in the interests of risk-avoidance and limitation, yet at the same time, some elements of resource-exploitation made the inhabitants more vulnerable to crisis.

Certain structures were laid down which allowed for a certain level of resilience in settlement. Indeed, this may be the reason why the Bourn Valley was able to stave off late-medieval demographic and economic crisis for longer than (for example) East Chilford. A 'proto-common field' was laid out in the Bourn Valley between the eighth and tenth centuries, probably organised by the local sokemen landowners of the region, and this seems to have coincided with the first crystallisation of the villages around points of common pasture and meadow. After this initial phase, a second rearrangement of the fields occurred from the eleventh century onwards, which was organised by the new Norman lords (although probably in negotiation with the communities). The laying down of the more orthodox open fields coincided with a shifting of settlement into new concentrated villages, and the expansion of the open fields went hand in hand with persistent demographic growth between the eleventh and thirteenth centuries. The open fields, laid out by coercive dominant groups such as manorial lords, were used by local inhabitants to balance out inequalities in the distribution of soils (which were of varying quality and drainage). The persistence of the open fields (which lasted all the way through to the nineteenth century parliamentary enclosure) did create some settlement stability in terms of location and structure. From the late Middle Ages to the nineteenth century, very little change was made to the pattern of concentrated villages – i.e. no movements towards dispersed settlement and no entirely new villages. Furthermore, the stability of direct demesne management and the open fields restricted or hindered the rise of a substantial group of prosperous tenant farmers, thereby limiting economic polarisation.

However, the coercive-repressive strategies for resource management also caused some vulnerability in settlement in the Bourn Valley – in particular from the 1320s and 1330s onwards. For example, as manorial lords extended arable agriculture into furthest corners of their parishes (including areas entirely unsuitable for cultivation), this encroached into the common pastures. By 1300, inhabitants had almost no access to grazing for their animals, except on the stubbles close to the brook. Thus, villagers lost an important means of their subsistence, which would have been made worse by the high pressure on resources as highlighted by the fragmentation of landholding into the tiniest of morsels. The average landholding was just 3.5 hectares and tenants held their land in tiny plots of 0.25 hectares and less. It has been suggested that the minimum landholding to support a medieval household which had no other income sources in England was around six hectares. Tiny landholdings were common, but because of the extension of demesne agriculture, inhabitants lost their safety net of common pastures, the woodlands were

destroyed (or reserved as signorial parks), and the continuing need for customary labour demands on the demesnes (a system which lingered on till the fifteenth century) reduced the time tenants could devote to other pursuits. It is doubtful whether local tenants were well-endowed enough to see off terrible crises of the early fourteenth century such as the famines between 1315 and 1322 – and a heritage of impoverishment has been described in other nearby villages such as Dry Drayton. Some of the manor houses were actually targeted and plundered by discontented rural folk during the peasants' uprising of 1381.

Although, some 'protectionist' strategies were employed by the Bourn Valley society in the late Middle Ages, eventually these were negated or hindered by the simultaneous employment of 'restrictive-coercive' strategies – mainly enforced by the manorial lords. Thus, as a result, the settlements can still be classed as 'moderately vulnerable' to exogenous crisis – as proved during the fourteenth century.

D: East Chilford, 1200-1400 – polarised-dynamic society

	Predicted results	**Actual results**
Strategies for managing resources	Short-termist	Short-termist
Settlement development	Highly vulnerable	Highly vulnerable

Compared to the Bourn Valley, East Chilford experienced a demographic and settlement crisis much earlier (already starting in the late-thirteenth century and long before the Black Death), as one might expect with more short-termist resource exploitation based around the fulfilment of interest groups. Indeed, there was a severe settlement contraction between 1279 and 1327.

The earlier and more severe retraction in settlement in East Chilford than in the Bourn Valley was ultimately down to the greater level of social and economic change that occurred from the second half of thirteenth century onwards. The early fragmentation of demesnes, the move to indirect exploitation, and spate of sales or leases to successful peasants had two effects. First, it led to high levels of social and economic polarisation, pushing the impoverished to the margins of subsistence or to search for pastures new. Land consolidation and economic polarisation was made worse by the beginnings of encroachment onto the peasants' common pastures. Second, the earlier dismantlement of the manorial system and the waning of the powers of extra-economic coercion created an imbalance between the demand for and the availability of labour. Remaining manorial lords with demesnes and successful tenant farmers with large farms in difficult economic conditions did not

want to resort to employing large quantities of wage labour. This, in effect, provoked the move from arable to pastoral farming from the late thirteenth century – which required less labour input. Essentially, social and economic change meant there was less work to go round – which was made exceptionally difficult at the beginning of the fourteenth century in the context of repeat harvest failure and plague. While a number of peasants benefited from increased chances of social mobility, a significant majority suffered from limited opportunities to work the land or even work other more successful peasants' lands.

E: The Betuwe, 1129-1350 – polarised-persistent society

	Predicted results	**Actual results**
Strategies for managing resources	Restrictive-coercive	Restrictive-coercive
Settlement development	Moderately vulnerable	Moderately vulnerable

The polarised-persistent society of the Betuwe between 1129 and 1350 was dominated by powerful interest groups such as large landowning manorial lords and ecclesiastical institutions, and these groups managed their resources through coercion and restriction. This led, in turn, to settlements which did to some extent initially benefit from certain structures being laid down through coercion, which were necessary for the resilience and development of human habitation. However, at the same time, it also created restrictions on the population which led to increased vulnerability of the settlements – especially against unexpected crises.

The emergence of an exploitative manorial system in the Betuwe in the Merovingian period did coincide with an expansion in settlement and cultivated area. Indeed, most of the villages which appeared along the Linge River were developed from the Merovingian or early Carolingian periods, as manorialism crystallised itself in the region. Interest groups within this coercive system were able to force subordinates to lay down structures needed for the sustainability of the settlements. Indeed, an open field system with randomly scattered plots was laid out around most of the Linge-villages from some point in the early Middle Ages, which was a classic medieval risk-management technique. Although there is no direct evidence, it is very likely that this process was organised by manorial lords and ecclesiastical institutions (probably in negotiation with the villagers). The Betuwe in the early and high Middle Ages was a wet and poorly drained area, where the lower-lying lands were sometimes constantly under water. New water management structures were laid out through the manorial system and the power of local interest groups, however, which began to

better protect the settlements and allow people to move into previously uninhabited areas. Indeed, one of the most significant constructions, the Diefdijk, was definitely laid out by aristocratic lords at the end of the thirteenth century. The Heren van Arkel, Everdingen, Hagestein, Vianen, and Ter Leede, all joined together to protect the Western Betuwe and the Vijfheerenlanden from the flow of water coming from the higher grounds of the Neder-Betuwe.

However, despite the appearance of these structures, the restrictive and coercive element of resource management in this polarised-persistent society eventually made settlement moderately vulnerable to crises – particularly environmental degradation. Indeed, manorial lords and ecclesiastical institutions as powerful interest groups tried to serve their interests by expanding cultivation into problematic areas (i.e. low-lying marshes which were difficult to drain). During the eleventh and twelfth centuries, aristocratic lords such as van Cuijk family pushed colonists to settle further away from the safe villages along the Linge. Such a policy, however, exposed more of the population to difficult environmental conditions. The lack of settlement stability can be discerned from evidence which shows a church and 20 farms with tithes belonging to the abbey of Marienweerd appearing in the marshy basins at Paveien in the early twelfth century, yet not long after the church's foundation, it had disappeared sometime between 1166 and 1210. The strategy made by interest groups to reclaim these lands also exacerbated the vulnerability of settlement by exposing the soil to oxidation, in turn lowering the surface-level of the ground and enhancing the chances of flooding. The soils probably were further ruined by the almost complete disappearance of the trees where colonisation was extended. In addition, the highly repressive conditions of manorialism in the Betuwe caused further instability, certainly by the thirteenth century, as serfs began to resent the extra-economic obligations imposed upon them – especially in light of the apparent freedoms which could be achieved in nearby newly colonised regions such as the Holland marshes. Indicative of the instability in settlement structure can be found in the evidence of 70 men casting off the shackles of serfdom and deserting the manor of Zoelmond in 1259.

F: The Betuwe, 1350-1650 – polarised-dynamic society

	Predicted results	Actual results
Strategies for managing resources	Short-termist	Short-termist
Settlement development	Highly vulnerable	Highly vulnerable

In the polarised-dynamic society of the Betuwe between 1350 and 1650, dominant interest groups were able to invoke significant change to the social and economic structure of the region, which allowed, in turn, new interest groups to emerge. Indeed, the dominance of a group of successful large tenant farmers was based around commercial exploitation of the available resources in order to secure and enhance their power and wealth, but at the same time this made an increasing section of 'unfortunates' more exposed to crises and problems. As a result, short-termist exploitation of resources by interest groups created rapid and significant change in the settlement structure, including the proliferation of large farmhouses further away from the Linge in the sixteenth century, but simultaneously led to the decline and collapse of the old village communities straddling the river.

Initially, conditions were ripe for settlement growth in the Betuwe. 1350 probably represented a population nadir in the region after a half-century of pestilences culminating in the Black Death. However, despite a series of well-documented plagues between 1350 and 1470, population stabilised and recovered slightly – probably down to the decline of coercive structures such as the manorial system and serfdom and the proliferation of a short-term lease which gave a wider proportion of people access to a piece of land. However, between 1470 and 1650 population again began to decline – even lower than its mid fourteenth century nadir. This can be put down to the emergence of a successful group of tenant farmers, who dominated the market in short-term leases (outbidding those less fortunate), and consolidated property around their own large brick farmhouses (located away from the main villages).

The strategy of these farmers was to commercially exploit their resources as much as possible to create surplus for trade at rapidly expanding urban markets. Investment was put into water management structures, which allowed for the reclamation of the marshes. Land was rearranged into consolidated units, improving productivity. New facilities such as storage barns and duck-decoys were built, and the orientation of the farms moved from arable cultivation more towards a pastoral economy, which included ox-fattening, horse-breeding, and dairy and meat production catering for urban demand. While, large farms proliferated in the

sixteenth century in the Betuwe, the rest of society was made more vulnerable by the social and economic changes. The consolidation of lease land in the hands of an elite group of farmers inevitably led to the loss of the means of production and proletarianisation of a larger section of Betuwe inhabitants. Large landowners and commercial tenant farmers had no interest in maintain peasant modes of exploitation, and this spelt the end for the old safety-net of the commons, which had been nearly entirely expropriated by the late Middle Ages. With no land, the inhabitants of the villages had to find work on the large tenant farmers as wage labourers, but this proved difficult when the farmers moved towards more capital-intensive, labour-extensive techniques associated with pastoral enterprises. Quite simply there was not enough work to go round. This problem was exacerbated by the lack of stimulation towards diversification and the establishment of proto-industries. As a result, while the large tenant farms prospered in the Betuwe, the old village communities began to contract as the inhabitants looked for new opportunities elsewhere – in particular drawn away by the lure of the cities of Holland. The village communities may have collapse entirely after 1650, were it not for the chance appearance of the potato, the cultivation of which on small plots was able to sustain more people.

G: The Oldambt, 1500-1750 – egalitarian-dynamic society

	Predicted results	**Actual results**
Strategies for managing resources	Flexible	Protectionist or risk-avoidance
Settlement development	Resilient and adaptable	Resilient and stable

In contrast to the sharply polarised vision of the Oldambt as a stark opposition of large farmers and agricultural wage labourers, the period 1500 to 1750 was one of great equality and freedom for the inhabitants. The lack of dominant interest groups in this region of Groningen (except for the steadily encroaching urban institutions and burghers by the eighteenth century) gave rural producers autonomy over their strategies for managing local resources, and allowed them to keep most of the surplus that they created. However, while it is certain that the egalitarian nature of this 'farmers' republic' gave the inhabitants great resilience against crises (particularly flooding and cattle pestilence), the strategy for resource management was probably more 'protectionist' and 'risk-avoidance' than 'flexible', although this could be an impression taken from a less substantial pool of documentary sources.

Anticipating the flooding of the Dollard, settlement had already moved further away from the coast by the beginning of the sixteenth century, up to the safer sandy ridges. From there, local peasant farmers were able to obtain a good grip on their own land through favourable jurisdictions over the wastes, which allowed them to take into their own property any piecemeal colonisation made into the marshes. The strip system of reclamation meant that the soil types were equally divided up between the colonists. The peasant-farmer reclamations, much like what happened earlier in medieval Holland, gave rural producers a solid position over the long-term, and no onerous extra-economic coercion or subordination to deal with. The egalitarian property structure according to reconstructions of the distribution of land in 1630, 1660, and 1721, suggest a persistently egalitarian society. Farmers seemed to be more concerned with protecting themselves through limiting risk than truly making use of the market and commercial opportunities. Farmers practiced a mixed pattern of arable and pastoral farming, on small or medium-sized family farms of 3 to 20 hectares. On the coast and in the marshes, fishing supplemented the income of agriculturalists. The farmers of the Oldambt seemed anxious to protect themselves from the potentially destabilising influence of the city of Groningen – vigorously disputing any commercial stipulations put on them, but were also even bitter about city officials improving the transport connections between Groningen and the Westfalen by building canals through the Oldambt. Local farmers could see no good in being tied in closer to the city; supported by the fact that new dikes constructed by the city just led to building up water pressure on an already over-burdened system, which increased the chances of flooding on the farmers' lands.

Thus, although the egalitarian-dynamic society of the Oldambt between 1500 and 1750 probably did not undertake flexible strategies for resource management in the sense of orientating themselves around new market opportunities, they instead looked towards protectionist and risk-avoidance techniques. Whatever the reality (the sources are limited), it is clear that the egalitarian aspect of Oldambt society gave the settlements some stability and resilience in the face of crises. Indeed, while the cattle pestilences and floods of the late seventeenth and early eighteenth centuries spelt the end for the smallest and most vulnerable of farmers, the fiscal documents suggest that population only declined in the region of 10-20 percent.

H: The Oldambt, 1750-1900 – polarised-dynamic society

	Predicted results	Actual results
Strategies for managing resources	Short-termist	Flexible
Settlement development	Highly vulnerable	Resilient and adaptable

The 'polarised-dynamic' society of the Oldambt between 1750 and 1900 was entirely dominated by powerful interest groups, which should have, according to the theoretical framework, followed short-termist strategies for exploiting resources, leading in turn to highly exposed and vulnerable settlements. In reality, this did not happen. In fact, a number of flexible and adaptive strategies for exploiting resources were followed, which led to almost entirely persistent demographic growth starting from 1730 and was not properly reversed until after the Second World War.

Why did the actual results not match up with the predicted results? The reason is clear. The Oldambt operated two simultaneous economies (a dual economy), which actually complimented each other. Although the Oldambt could certainly be described as a 'polarised-dynamic' society, two different 'strategies for managing resources' and 'settlement developments' were produced. In a sense, the prediction of short-termist strategies for managing resources is correct. Urban capital financed the reclamation of vast expanses of marshland creating large polders; a development when taken in combination with population growth and the crystallisation of the hereditary leases (*beklemrecht*), led to the consolidation of land in the hands of a minority of successful tenant farmers. Meanwhile, the less fortunate majority living in the Oldambt lost their land and became agricultural labourers on the farms. Although initially work was plentiful on the capital-intensive large farms, eventually with technological developments and the arrival of outside seasonal workers, unemployment became rife. Labourers were shifted from living on the farms themselves and moved into their own sombre labour pools, often located on the peat-edges of the polders, where the tiny hovels sunk into the mud. Eventually labourers could not even afford to buy bread from their local bakeries, and by the end of the nineteenth century, economic polarisation was so sharp that labourers began to resort to more radical politics – culminating in the tragic strikes of 1929 where numerous Oldambt inhabitants died of starvation.

Such a situation does not appear to lend itself to persistent demographic growth between 1730 and 1950. However, the effects of the short-termist strategies for resource-management by powerful interest groups, and the exposure and vulnerability of the labourer settlements in the Oldambt were negated by the

simultaneous appearance of a second (flexible) strategy for resource management. Any vulnerability that the settlements in the region would have normally experienced, were entirely limited by this second economy. Although authors have tended to emphasise the polder reclamations and the disparity between the farmers and labourers in this region, less attention has been paid to the diverse range of proto-industrial and non-agricultural opportunities present. Thus, the initial short-term rapid demographic growth in the eighteenth century was extended for much longer than normal by the flexible resource exploitation strategies available to labourers in the nineteenth century. Short working days on the large farms gave labourers time to intensively cultivated plots of potatoes. Others found peat digging work in the Veenkolonien, or as gravel compacters or transporters of goods along the canals. Nearly half the population in 1807 were recorded as doing 'non-agricultural' work, a proportion only liable to increase through the century with the growth of the regional capital, Winschoten, and the emergence of the cardboard box factories.

I: Ascoli Satriano, 1600-1900 – polarised-persistent society

	Predicted results	**Actual results**
Strategies for managing resources	Restrictive-coercive	Flexible (1600-1800); Repressive-coercive (after 1800)
Settlement development	Moderately vulnerable	Flexible and resilient (1600-1800); Moderately vulnerable (after 1800)

The difficulty with modelling settlement development in the polarised-persistent society of Ascoli Satriano was that the strategies for managing resources took a significant change in direction after 1800 (even though the society always remained highly polarised with a great disparity between large landowners and the landless).

Although Ascoli society was deeply inequitable and dominated by interest groups who had perpetuated polarised land and wealth distributions over the long-term, in fact resource exploitation was quite flexible and adaptable (which flies in the face of what generally is written about the economy and society of Southern Italy). Although Ascoli was hit quite severely by the cattle pestilences of the mid seventeenth century, after that point the population quickly recovered and grew at a moderate rate. It was during this period that Ascoli acquired its general characteristics as a concentrated town, with little attempt habitation further out in its territory apart from *masserie*. The difficulty in matching up a polarised-persistent society with a flexible set of strategies for resource management lies in the fact that powerful

interest groups such as absentee ecclesiastical institutions, feudal lords, and aristocrats, skilfully maintained their dominance by dynamic responses to changing conditions. Rather than a perception of an unchanging landscape of capital-extensive, labour-intensive *latifundia*, the concentrated town structure of Ascoli was solidified and crystallised in the eighteenth century under a context of capital-intensive large-scale pastoral farming, but also a high level of commercial and trade occupations in the town itself. Those working outside the agricultural sector nearly came to 50 percent in the mid eighteenth century.

After 1800, however, the resource-management strategies and settlement development conformed much more clearly to what can be predicted of a 'polarised-persistent' society. The Royal Customhouse-managed system of transhumant pastoral farming disappeared in 1806, and the vast lands were put up for public auction. What happened, however, was that the land simply fell into the hands of the already wealthy institutions and aristocrats who had invested in pastoral farming. Once the land was consolidated in their hands, they decided to revert to the classic latifundist system of grain-monoculture, with absolutely minimal investment in their land which became ecologically ruined. Of course the move towards grain agriculture supported more workers, and thousands of migrant labourers flooded into Ascoli and swelled the suburbs – turning it into an archetypal example of a Southern Italian agro-town. The landless wage workers were pushed into the densely packed concentrated towns, living in the most insalubrious conditions (sometimes underground), renting hovels from the large landlords and entirely dependent on being selected for low paid unpredictable wage work from a selection process on the piazza every morning. No changes could be made to the system and any threats from workers unions were violently crushed by soldiers in the large landlords' pay. The more that the ecologically balanced system of regional exchange gave way to monoculture and the impoverishment of the soils and destruction of woodland, the lower the yields did become, and the more large landlords squeezed their subordinate workers. As a result of these restrictive and coercive new methods for exploiting resources, population initially sky-rocketed as a result of increased availability of work, but the system was always susceptible to collapse. This came eventually in the twentieth century, as extreme polarisation and poverty led to growing levels of rural violence and banditry, and the eventual exodus of impoverished workers to new opportunities further north. This set in motion a retraction in settlement which continued to this day and those young people left behind are either working in family businesses or without stable employment.

J: Locorotondo, 1600-1900 – egalitarian-dynamic society

	Predicted results	Actual results
Strategies for managing resources	Flexible	Flexible
Settlement development	Adaptable and resilient	Adaptable and resilient

Locorotondo between 1600 and 1900 almost perfectly fits the principles of the framework laid out in this thesis for 'egalitarian-dynamic' societies. Quite clearly over a long period of 300 years, the flexible strategies chosen for exploiting and managing local resources led to settlements which not only adapted in structure and lay-out, but were entirely resilient against crises.

Although Locorotondo suffered a level of settlement contraction after the pestilences of the mid seventeenth century, the effects were minimal when compared with nearby regions of Apulia (such as Ascoli) which were composed of different societal configurations (polarised-persistent, for example). Locorotondo was not dominated by large landowners with massive herds of cattle, thus did not suffer from the diseased cattle epidemics. The mixed exploitation of arable, pastoral and woodlands resources served it well during this period. The commons had been expropriated by the seventeenth century, but importantly this was not by dominant interest groups but by local peasants themselves, who gained a solid grip into local landholding. After 1669, Locorotondo experienced a constant and solid increase in population all the way into the twenty-first century. Of all the demographic sources compared, none between 1669 and 2010 show any prolonged periods of settlement decline or stagnation, let alone collapse. Such resilience (and growth) in settlement was supported by flexible resource management which was not dominated by interest groups. In the eighteenth and nineteenth centuries, an even larger proportion of local peasants received access to land through emphyteutic concessions by feudal lords and ecclesiastical institutions, which stimulated a widespread conversion towards commercialised viti-culture. As peasant families began to prepare the soil for the planting of vines, and exploit an international market for wine, the settlement structure was adapted to a more dispersed distribution of trulli, which began to scatter even further across the countryside. The move to viti-culture and the dissemination of the rewards into the hands of the peasant producers allowed for consistent and prolonged growth in settlement.

K: Florentine *contado*, 1300-1580 – polarised-persistent society

	Predicted results	Actual results
Strategies for managing resources	Repressive-coercive	Repressive-coercive
Settlement development	Moderately vulnerable	Highly vulnerable

In line with a general increase in population across Western Europe between the eleventh and thirteenth centuries, the Florentine *contado* was teeming with folk by 1300 – in fact one of the most densely populated areas of countryside within the pre-industrial world. The fourteenth to the sixteenth centuries, however, was in contrast a period of great demographic crisis in the *contado*. Cultivation began to retract, farms were abandoned, and settlement structures almost entirely collapsed in places. The reduction in settlement was so severe actually, that to say the predicted settlement development was 'moderately vulnerable' is a slight understatement. In fact, it would be more appropriate to call the settlements 'highly vulnerable' given the extent of the decimation.

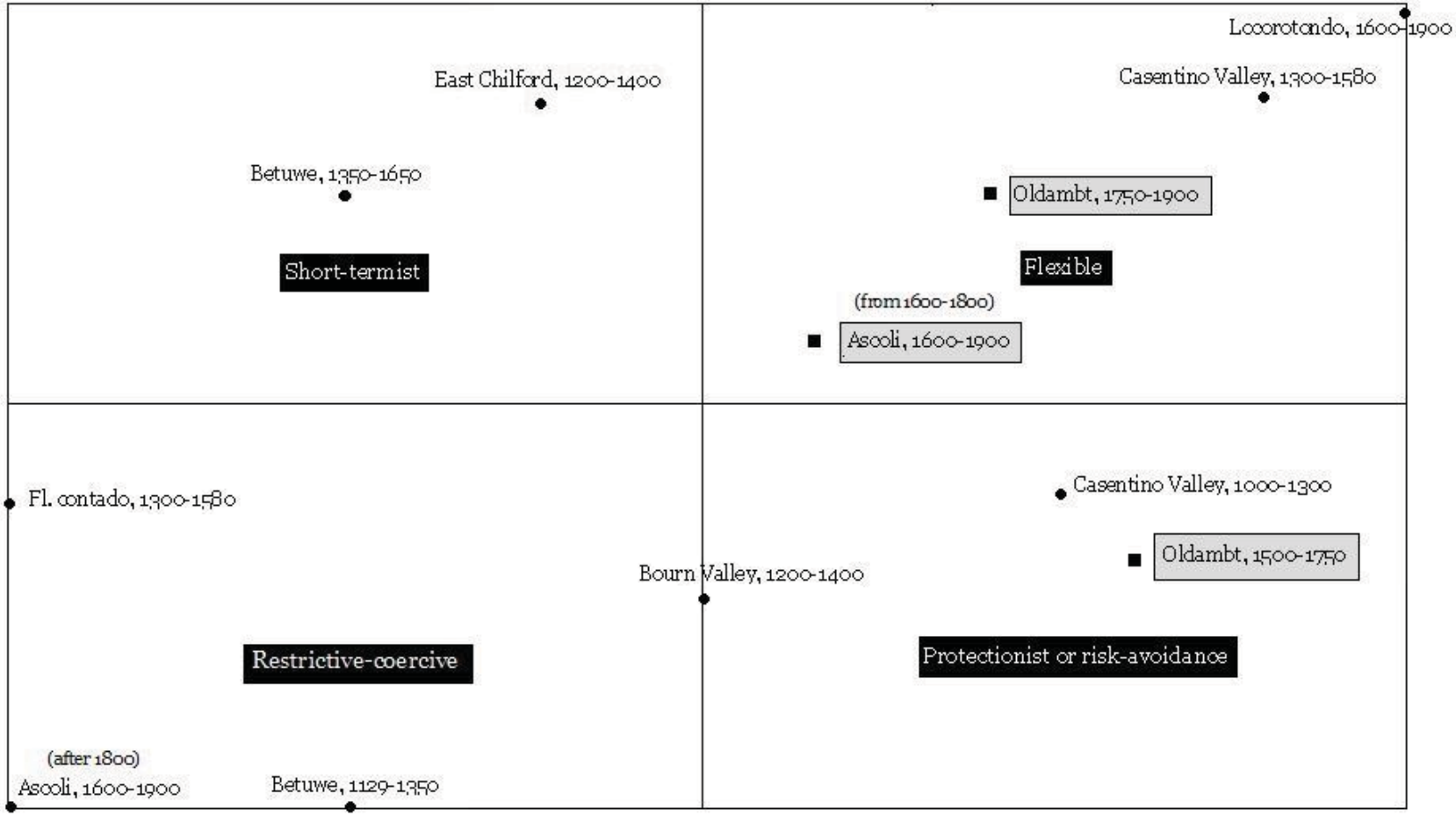
The slight misalignment of 'strategies for managing resources' and 'settlement development' for this case study probably stems from the fact that the dominant interest groups within the *contado* did not lay down hardly any structures that could be labelled as beneficial to the long-term sustainability of habitation. At best one could say that urban capital flowed into the *contado* to construct new buildings and farms on the sharecropping *poderi*, though the appearance of these new farms may have simply sped up the collapse of the existing *castelli* and *castri*. In any case, nearly all of the restrictive and coercive strategies used by (usually urban) interest groups to exploit resources more intensively in the rural hinterlands of Florence exposed the settlements more to crisis. Urban expropriation of rural landholding not only left country-folk landless, but it ate into the commons as their safety-net which entirely disappeared. The coercion exploitation of resources was based mainly around two important facets in the late Middle Ages, however. First was the harsh fiscal oppression by the Florentine State, which became so burdensome on the rural population that they simply abandoned their lands and migrated towards the city in droves – particularly in times of poor harvests and pestilence. Second was the imposition of sharecropping through urban investment. Although this supplied the rural people with much needed credit and capital to finance all the equipment, seeds, animals, and buildings necessary for running a peasant farm, it created an almost 'feudal-like' relationship between urban landlord and rural tenant, and put rural producers in a position of subordination where their contract could easily be

terminated. Moreover, the sharecropping farm was an entirely restrictive method of exploiting resources. The demands of the landlord and the demands of the intensively-farmed mixed-enterprise left absolutely no room for the development of new economic activities or proto-industries (which were restricted in any case by the urban guilds), which also gave people without sharecropping farms absolutely no reason to live in the countryside – stimulating rural-urban migration. Thus, in sum, the restrictive-coercive strategies imposed by dominant interest groups left the *contado* entirely vulnerable and ready producers ready to abandon – in fact probably a lot more vulnerable than other comparable polarised-persistent societies.

8.5 Comparing the predicted outcomes and the actual results for all the case studies. Is the hypothesis presented a convincing one?

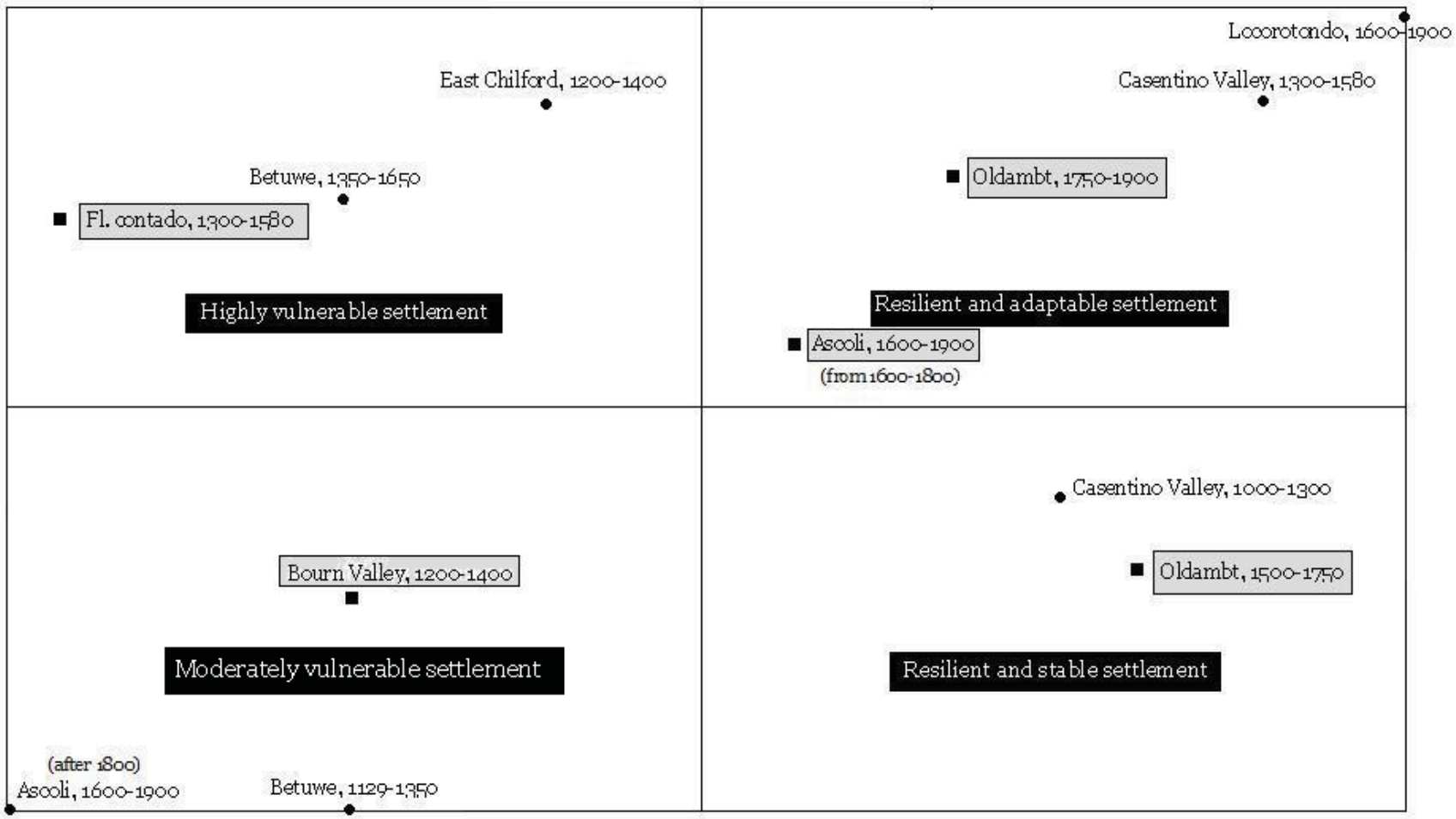
The two figures below show how much the actual 'strategies for managing resources' and 'settlement developments' differed from the predictions made by applying the principles of the general framework outlined in chapter two. In both figures, all societies written in the same black text as the 'predictions figures' represent a positive match between the predicted and actual results. Any discrepancies between predicted and actual results, however, are shown up on the figures (positioned in their 'real' place) as highlighted in grey.

Figure 8.6 Actual strategies for resource management in all the case studies[1068]



[1068] Societies in the grey background displayed different strategies for resource management than what was predicted according to the principles of the hypothesis.

Figure 8.7 Actual settlement development in the case studies[1069]



[1069] Societies in the grey background displayed different settlement outcomes than what was predicted according to the principles of the hypothesis.

8.6 What are the flaws and problems with the hypothesis?

In the thesis, it has been suggested that within the pre-industrial period, there existed a close connection between the way society was arranged and the way settlements developed. In effect, certain 'types of societies' produced settlements which were stable and resilient over the long-term (perhaps in the face of crises), while other 'types of societies' led to more unpredictable settlement development paths, with possibly higher levels of vulnerability to crises. The causal connection between the 'types of societies' and the settlement outcomes was the different ways each society-type developed strategies for managing and exploiting their resources. The hypothesis has been tested using a number of empirical case studies between the Middle Ages and the nineteenth century. Figures above have been used to compare the predicted strategies for managing resources and settlement outcomes according to the principles of the framework, with the real results. The question is then, how close do the results match?

Of the 11 different 'types of societies' identified, 8.5 of them (the 'half' explained shortly) produced strategies for managing resources which were the same as predicted, while 6.5 of the society-types produced settlement development in line with what was expected. Before moving into the problems and limitations of these results, it is necessary to say that the high proportion of matching predicted and actual results shows at the very least that the framework cannot be dismissed out of hand. Not everything is correct, not everything is entirely predictive – but then this is also to be expected. In fact, the number of 'non-matches' between predicted and actual results can be seen as a positive thing: it shows that the framework was not merely shaped and moulded to fit tidily with the empirical case studies. A hypothesis which cannot be invalidated at all (is 100 percent secure) in the discipline of history or the social sciences is not as convincing as a hypothesis with some room for criticism.[1070] Another positive element is the high number of cases where the 'strategies for managing resources' and 'settlement developments' are linked. In fact, only in two situations did the two results diverge from what was predicted (the Florentine *contado*, 1300-1580, and the Bourn Valley, 1200-1400) – highlighting the strength of resource management decisions as the causal link between society and settlement.

There were, of course, some problems with the theoretical framework. Both periods for the Oldambt showed different strategies for exploiting their resources than what was expected. Also, for some of the period tested, Ascoli Satriano

[1070] Van Bavel, pers. comms. (April, 2012).

employed different strategies than predicted (although part of the period did conform to expectations). Why did these negative results occur, and what does this say about the limitations of the framework? One of the big problems it seems, especially revealed by the society of the Oldambt (1750-1900), is that societies did not always have one way of managing and exploiting their resources. Indeed, the problem with the Oldambt (1750-1900) was that two resource exploitation strategies were performed simultaneously or with considerable overlap. It did conform to its 'polarised-dynamic' status with the emergence of a deeply inequitable polder society with new reclamations exploited commercially by interest groups (short-termist resource exploitation), but at the same time, impoverished labourers managed to create for themselves their own strategies for resource management – away from the large tenant farms, and which took a more flexible form with the combination of proto-industrial and seasonal work. Thus, the main problem is that while many pre-industrial societies followed very clear strategies for managing resources (identifiable as one of the four in the framework), other societies combined strategies.

Certainly this problem is a serious one in the case of the Oldambt (1750-1900), because there is a simultaneous employment of very contrasting strategies: short-termist resource management (producing vulnerable settlements) and flexible resource management (producing more resilient settlements). This problem really does hinder the predictive qualities of the framework. However, the problem does not always have to be as serious as that. For example, the Oldambt (1500-1750) was predicted as an 'egalitarian-dynamic' society to exhibit flexible strategies for resource management (and in turn, adaptable and resilient settlement), yet in reality it displayed quite protectionist and risk-avoidance strategies (and in turn, stable and resilient settlement). It is clear the predicted strategies differ from the actual results, but is that really so important given the very basic objectives of the research? Whether the Oldambt between 1500 and 1750 produced protectionist or flexible strategies for resource management, it does not really matter so much. We still are reassured that the Oldambt produced strategies leading to resilient settlement development – that is to say, the settlements of the Oldambt between 1500 and 1750 certainly were not vulnerable in the same way that the Betuwe or the Florentine *contado* was.

There were two cases (the Florentine *contado*, 1300-1580, and the Bourn Valley, 1200-1400) which showed the same predicted and actual strategies for resource management, but displayed slightly divergent settlement development. Such was the extent of the devastation of settlement in the late-medieval *contado*, the status of 'moderately vulnerable settlement' was deemed too weak, and thus the

actual settlement development was assessed as 'highly vulnerable'. There are some methodological problems here. What does it mean to be 'moderately vulnerable' and 'highly vulnerable'? There are also grounds for saying that the actual settlement outcome should not have been changed – and that they should indeed have matched. The problem seems to be that the extent of settlement devastation (i.e. the extent of the settlement decline in the *contado*) has been mixed up with the chances of settlement devastation. In effect, a society can have quite moderate chances of settlement collapse and devastation, but at the same time the extent of this collapse and devastation can be really extreme. In that sense, it is debatable whether the Florentine *contado* really represents a failed match-up between predicted and real settlement development. As with the above paragraph, however, we have to ask ourselves whether these finer details really matter? Whether the Florentine *contado* between 1300 and 1580 was 'moderately vulnerable' or 'highly vulnerable' to settlement collapse is not so important – the significant thing is that it was definitely a vulnerable society, resulting from its 'restrictive-coercive' strategies for resource management, informed by its 'polarised-persistent' societal configuration. Similarly, for the Bourn Valley, settlement development was classified as 'moderately vulnerable' despite the resource-management strategies straddling the line between 'protectionist or risk avoidance' and 'restrictive-coercive'. This is not a problem, however. All it shows is that the Bourn Valley was a more 'extreme' version of a society employing 'repressive-coercive' strategies: it did indeed lay down some risk-avoidance structures, but in the end, these were always going to be negated or hindered by the repressive or extractive exploitation methods – explaining the settlement status as 'moderately vulnerable'.

In sum, while the finer points of the framework have some room for improvement and will benefit from further testing, the basic premise that the resilience or vulnerability of settlements to crisis is connected to the different strategies for managing resources (informed by the distinctive configuration of societies), appears to be a convincing one, or at least on the right track, notwithstanding some methodological limitations which need to be ironed out in the future.

8.7 Society and settlement: where do we go from here?

Notwithstanding the problems of the general theoretical model offered, a basic limitation of this thesis is that it is based on the research of individual PhD candidate. In that sense it has been tested through a limited number of case studies which are

confined geographically to selected areas in Western Europe. In order to refine the framework and test it more rigorously, it is hoped that the principles of the framework can in the future be applied to the wider pre-industrial world. Do the basic tenets of the framework hold up for early medieval Iraq, seventeenth-century Barbados, or nineteenth-century India? Furthermore, the framework hopefully can prove to have more direct value for contemporary society. Despite the passing of the Industrial Revolution and the emergence of global capitalism, much of the world today could still be effectively classed as 'pre-industrial'. A significant proportion of the world still lives in the countryside, a significant proportion still works the land, and a significant proportion is terribly poor. It would be interesting to begin to re-focus the theoretical framework towards modern-day 'under-developed' and 'developing' regions of the world[1071] – from Zimbabwe to Haiti, and from Pakistan to South Sudan. Many of the villages and towns in, for example Somalia, are self-evidently unstable and are vulnerable to collapse – they are not resilient against economic crises and natural disasters. Environmental and economic misfortune leaves millions of people on the precarious verge of starvation. In order to more effectively help vulnerable societies, we have to understand more clearly what makes them so vulnerable. In that respect, the theoretical framework offered in this thesis may be a useful starting point.

Of course, the reader may be slightly confused by this sentiment – surely we already know what makes the impoverished sheep herders of Somalia vulnerable to crisis? I would argue no, however, and it is a fallacy which informs a lot of international development policy today. This thesis has tried to move away in its philosophy from much contemporary thinking which suggests that the world's problems can be solved through a relentless pursuit of economic growth. There is still a perception that sustainable and stable human habitation over the long term can be achieved through reliance on technological innovations, the provision of medicines, or by throwing large amounts of capital at impoverished regions, in the recent trend towards big business philanthropy. Furthermore, the World Bank has suggested that the market and the emergence of clear property rights in private hands are the best conditions for coping with terrible crises such as famine.[1072]

The basic principle behind the framework offered in this research focusing on the pre-industrial world, however, is that the intrinsic arrangement and configuration of society was more important for establishing resilient settlement development – and this is a sentiment which I believe may be applicable for modern-day collapses in

[1071] Categorisation according to the Human Development Index.

[1072] World Bank, *Agriculture for development. World Development Report 2008* (Washington, 2007).

habitation. There has been an over-reliance on the protective functions of the market, the state, or technological innovation.[1073] Yet what is clear from testing the theoretical framework is that a big part of societies' capacity to withstand and be resilient in the face of environmental and economic crises is connected with equality: not just equality in the distribution of wealth or land (even though this is a big part of it), but an egalitarian distribution of power and involvement in essential decision-making processes,[1074] which determine the ways in which society is able to exploit, manage, and care for its resources. This is probably a nice sentiment to end on. To ease the vulnerability of contemporary societies, we should not be looking towards a more technologically-advanced, or even a 'smarter' world, but a fairer, more egalitarian one. As Ted Steinberg has recently reminded us, natural disasters not only hit the most impoverished populations disproportionately, but their consequences are often far more destructive when institutions and decision-making bodies are skewed to the interests of the wealthy and powerful.[1075]

[1073] The capacity for each of these to fail to protect human populations from crisis has been addressed in, for example, Blaikie et al., *At risk*, 46-61; W. Shughart, 'Katrinanomics: the politics and economics of disaster relief', *Public Choice*, 127.1 (2006), 31-53; A. Boin, L. Comfort & C. Demchak, 'The rise of resilience', in *Designing resilience: preparing for extreme events* (Pittsburgh, 2010), 5-6; T. Lambrecht & E. Vanhaute, 'Famine, exchange networks and the village community. A comparative analysis of the subsistence crises of the 1740s and the 1840s in Flanders', *Continuity & Change*, 26.2 (2011), 155-86.

[1074] Linking up with recent literature on resilience, adaptive institutions, and the establishment of politically empowered grassroots actors in J. Friedmann, *Empowerment: the politics of alternative development* (Oxford, 1992); 'Rethinking poverty: empowerment and citizen rights', *International Social Science Journal*, 48 (1996), 161-72.

[1075] Steinberg, *Acts of God*.

Chapter 9
Summaries in Dutch and Italian (Samenvatting/Riassunto)

9.1 Pre-industriële samenlevingen en exploitatie strategieën van middelen. Een theoretisch kader ter verklaring voor de duurzaamheid of kwetsbaarheid van nederzettingen ten overstaan voor crisis.[1076]

Samenvatting

Dit proefschrift richt zich op de vraag: waarom waren sommige nederzettingen in de pre-industriële periode duurzaam op de lange termijn, terwijl andere nederzettingen kwetsbaar voor crisis waren? Inderdaad, waarom waren bepaalde woningen meer vatbaar voor verval of zelfs totale ineenstorting dan andere? Alle pre-industriële samenlevingen moesten ergens economische, ecologische, en agrarisch uitdagingen confronteren, dat in de vorm van hongersnood, oorlog, onteigeningen, overstromingen, mislukte oogsten, pestilentie, zware belasting, of de verdwijning van waardevolle middelen in het nastreven van commerciële winst konden komen. In dat geval, hoe kunnen we verklaren waarom sommige maatschappijen deze problemen konden overkomen, terwijl andere samenlevingen vatbaar bleken, als nederzettingen stagneerde, werden verlaten, of zelfs volledig verdwenen.

Dit proefschrift plaatst de verschillende organisatievormen van samenlevingen in de voorhoede van het theoretisch kader. Het wordt gesteld dat de manier waarop samenlevingen waren georganiseerd een grote impact had op de ontwikkelde strategieën voor de exploitatie en het beheer van hun middelen. Dir dicteerde de mate waarin sommige nederzettingen lange perioden van stabiliteit en veerkrachtigheid ervoeren (mogelijk ook wanneer geconfronteerd met ernstige crises), terwijl andere nederzettingen kwetsbaar voor neergang waren en uiteindelijk vervielen. Een systeem wordt bedacht om; (a) bepaalde 'basiscategorieën van pre-industriële samenlevingen te herkennen, (b) deze samenlevingen op een logische manier te verbinden met verschillende strategieën voor het beheer van middelen, en (c) om de verschillende beheer-strategieën te verbinden op bepaalde 'nederzetting-uitkomsten'.

De hypothese is als volgt. Ten eerste kunnen pre-industriële samenlevingen in vier basiscategorieën worden verdeeld, op basis van een beoordeling van hoe egalitair of gepolariseerd (een proef van gelijkheid), en dynamisch of aanhoudend (een proef van verandering) een aantal van hun belangrijkste configuraties waren (vier in totaal – bezit, macht, grondstoffenmarkten, exploitatiewijzen). Deze bepaalde 'basistypen' kozen verschillende manieren van middelenbeheer. De 'egalitaire-aangehoudende'

[1076] Thanks to Lotte van der Vleuten (Utrecht University/Radboud University Nijmegen) and Dr. Auke Rijpma (Utrecht University) for their language corrections and improvements.

samenlevingen benutten hun middelen met het gebruik van protectionistische strategieën met een oog op risicovermijding en risicobeheer. Dit leidde tot zeer veerkrachtige nederzettingen op de lange termijn, vooral wanneer geconfronteerd werden met exogene crisissen zoals mislukte oogsten en epidemieën. De 'gepolariseerd-dynamische' samenlevingen gebruikten korte termijn beheer-strategieën, waar belangengroepen zo veel voordeel te halen uit de beperkte middelen; maar tegelijkertijd werd de bevolking meer blootgesteld aan risico's. De gevolge was dat nederzettingen plotselinge door korttermijn economische gewin konden verschijnen maar tegelijkertijd vatbaar waren voor snelle neergang of zelfs ineenstorting. De 'egalitaire-dynamische' samenlevingen benutten hun middelen op een flexibele manier als reactie op verandering. Zodoende, leidde dit tot buigzame nederzettingen die organisch konden groeien en verder kreeg hun veerkracht uit de inherente flexibiliteit van de maatschappij. Uiteindelijk, 'gepolariseerd-aangehoudende' samenlevingen gebruikten hun middelen door middel van onderdrukking en beperking. Dit leidde tot geheel afhankelijke nederzettingen die van structuren nodig voor stabiliteit op de lange termijn kon profiteren (opgezet door dwang), maar tegelijkertijd confronteerde beperkingen op hun besluitvorming processen. Dus, waren deze nederzettingen vrijwel kwetsbaar voor exogene crises (wellicht op mindere mate dan de nederzettingen van 'gepolariseerd-dynamische' samenlevingen).

Deze hypothese wordt door empirisch onderzoek op vijf case studies getest in verschillende geografische gebieden in Engeland, de Lage Landen, en Italië, van de Middeleeuwen tot de negentiende eeuw. Ook al hebben de finesses van het kader wat ruimte voor verbetering en inderdaad zullen deze van verdere onderzoek profiteren, het uitgangspunt dat de veerkracht of kwetsbaarheid van nederzettingen voor crisis op verschillende strategieën voor het beheer van middelen werd verbonden, bleek een overtuigende te zijn (uit de resultaten van de conclusie).

Dit proefschrift heeft zich filosofisch verrijdend van veel contemporaine gedachten die stellen dat de wereldproblemen door een meedogenloos streven naar economisch groei kunnen worden opgelost. Er is nog steeds een perceptie dat duurzaam en stabiele bewoning op de lange termijn door de toepassing van technologische innovaties kunnen worden bereikt, of door middel van grote kapitaal investeringen in arme regio's, in de recente tendens tot grote bedrijven filantropie. Volgens het World Bank is er een aantal van basiscondities voor 'developing' en 'under-developed' samenlevingen om om te gaan met vreselijke crises zoals hongersnood; bijvoorbeeld, vertrouwen in de markt en het staan van duidelijke eigendomrechten in private handen. Hoewel het uitgangspunt achter het kader dat in

dit onderzoeksproject is aangeboden, is dat de inrichting en configuratie van de maatschappijen belangrijker was om de instelling van veerkrachtig pre-industriële nederzettingen te waarborgen. Ik geloof dat dit concept voor moderne ineenstortingen in nederzettingen tevens kunt toegepast worden. Er is een te eenzijdige focus op de 'beschermende' functies van de markt, de staat, en technologische innovatie. Wat duidelijk uit het theoretisch kader naar voren komt is dat een groot deel van de veerkracht van samenlevingen tegenover ecologische en economische crises een verband met gelijkheid heeft. Dat is niet alleen in de verdeling van rijkdom of land (ook al is dit een groot deel ervan), maar een egalitaire verdeling van macht en de deelname aan de essentiële besluitvormingsprocessen, dat bepalend zijn voor de manier waarop samenlevingen voor hun middelen kunnen zorgen. Om de kwetsbaarheid van de hedendaagse samenlevingen te vergemakkelijken, zouden we niet op zoek moeten naar een meer technologisch-geadvanceerde wereld, of niet een 'slimmere' wereld, maar een eerlijkere en meer egalitaire wereld.

9.2 Società pre-industriali e strategie per lo sfruttamento delle risorse. Un quadro teorico per comprendere perché alcuni insediamenti sono resistenti e alcuni insediamenti sono vulnerabili di fronte alle crisi.

Riassunto

La domanda principale di questa tesi è perché nel periodo pre-industriale alcuni insediamenti si rivelarono resistenti e stabili sul lungo periodo, mentre altri si dimostrano vulnerabili di fronte alle crisi. In effetti, perché alcune insediamenti erano più vulnerabili al declino o al collasso di altri? Tutte le società pre-industriali hanno dovuto affrontare ad un certo punto sfide economiche, ambientali e agricole, che potevano concretizzersi in forma di carestie, guerre, espropriazioni, inondazioni, raccolti falliti, la pestilenza, une tassazione dura, o la scomparsa di risorse preziose per ricerca del profitto. Allora, come possiamo spiegare perché alcune società potevano superare o negare questi problemi, mentre altre società erano destinate al fallimento, dettato dalla contrazione, stagnazione, abbandono o persino scomparsa di insediamenti.

Questa tesi porta in primo piano sul quadro teorico le diverse organizzazione delle società. Si suggerisce che il modo in cui la società era organizzata ebbe un grande impatto sulle strategie concepite per lo sfruttamento e la gestione delle risorse. Quest'ultime determinavano infatti le possibilità di resistenza e stabilita sul

lungo termine (anche di fronte a gravi crisi), mentre altri insediamenti erano destinati al fallimento e persino al collasso. Un sistema e definito per (a) distinguere particolari tipi di società pre-industriali, (b) stabilire una relazione tra i tipi di società pre-industriali e le strategie per lo sfruttamento delle risorse, e (c) collegare le diverse strategie di gestione delle risorse ai risultati ottenuti in particolari insediamenti.

L'ipotesi è la seguente. In primo luogo, si suggerisce che le società pre-industriali potrebbero essere divise in quattro tipi principali, definiti sulla base di una valutazione di quanto fossero egualitari o polorizzati (cioè una prova di uguaglianza), e dinamici o persistenti (cioè una prova del cambiamento) un certo numero di sue configurazioni principali (quattro in totale – la proprietà, il potere, i mercati dei beni, i modi di sfruttamento). Questi particolari tipi di società pre-industriali scelsero modi diversi di sfruttare le loro risorse. Le società 'egualitarie-persistenti' sfruttarono le proprie risorse tramite strategie protezionistiche e con un occhio sulla prevenzione e gestione dei rischi. Di conseguenza, esse produssero insediamenti molto resisteni sul lungo termine, soprattutto a fronte di crisi esogene come i cattivi raccolti e le pestilenze. Le società 'polorizzate-dinamiche' hanno sfruttarono le loro risorse impiegando strategie a breve termine grazi alle quali gruppi di interesse dominanti cercarono di ottenere il più possibile da risorse finite, cosí al tempo stesso espondendo al rischio la più larga popolazione. Cosí, esse produssero insediamenti più inclini a rapide trasformazioni; città, villaggi e fattorie potevano apparire improvvissamente grazie guadagno economico a breve termine, ma altrettanto rapidamente erano suscettibili al collasso o alli abbandono totale. Le società 'egualitarie-dinamiche' sfruttarono le loro risorse in modo flessibile rispondendo ai cambiamenti – e spesso orientando la produzione verso nuove direzioni. Di conseguenza, questo produssero insediamenti adattabili che potevano svilupparsi in modo organico, e inoltre, sviluppare risistenza grazie all'instrinseca adattabilita. Infine, le società 'polorizzate-persistenti' tendevano a sfruttare le proprie risorse con la repressione e la restrizione. Cosí, esse produssero insediamenti completamente dipendenti che potevano beneficiare di strutture necessarie per la resistenza a lungo termine, ma allo stesso tempo dovettero affrontare le restrizioni dettate dai loro processi decisionali. Ciò poteva portare ad un incapacità di adattarsi alle nuove condizioni, e pertanto, ad una vulnerabilita che poteva esporla al collasso. Questi insediamenti, dunque, erano abbastanza vulnerabili di fronte crisi esogene.

Questa ipotesi è stata testata attraverso una ricerca empirica su cinque 'case studies' distribuiti su cinque diverse regioni geografiche e diversi periodi di tempo; Inghilterra, i Paesi Bassi e l'Italia, tra il Medioevo e il XIX secolo. Mentre i punti più delicati del quadro hanno qualche margine di miglioramento, e potranno beneficiare

di ulteriori prove, la premessa di base che la resistenza o la vulnerabilità degli insediamenti di fronte crisi è connessa alle diverse strategie per la gestione delle risorse (influenzate dalle diverse forme di organizzazione della società), sembra essere convincente quando si considerino i risultati esposti in conclusione.

Questa tesi ha cercato di allontanarsi nella sua filosofia dal pensiero contemporaneo, che suggerisce che i problemi del mondo possano essere risolti attraverso un'incessante ricerca della crescita economica. C'è ancora la percezione che una presenza umana sostenibile e stabile sul lungo tempo possa essere raggiunta attraverso il ricorso a innovazioni tecnologiche, o investendo grandi quantità di capitale in regioni povere, secondo la recente tendenza alla filantropia del 'big business'. La World Bank ha suggerito che il mercato e l'emergere di chiari diritti di proprietà in mani private siano le migliori condizioni per far fronte a crisi terribili come la carestia. Il principio di base a sostegno del quadro teorico offerto da questa ricerca concentrata sul mondo pre-industriale, considera che la disposizione e l'organizzazione della società siano più importanti per stabilire gli insediamenti resistenti – e questo è un'idea che credo potrebbe essere applicabile ai moderni insediativi. C'è stato un'eccessiva fiducia nelle funzioni di protezione del mercato, delllo stato, e dell'innovazione tecnologica. Tuttavia, ciò che emerge dalla verifica del quadro teorico è che una grande parte delle capacità di resistenza delle società di fronte a crisi ambientali ed economiche è collegata all'uguaglianza: non solo l'uguaglianza nella distribuzione della ricchezza o della terra (anche se sitratta di una parte importante), ma anche una distribuzione egualitaria del potere e della partecipazione nei processi decisionali fondamentali, che determinano i modi in cui la società puo gestire le sue risorse. Per alleviare la vulnerabilità delle società contemporanee, non dobbiamo guardare ad un mondo più technologicamente avanzato, o ad un mondo più 'intelligente', ma invece, ad un mondo più egualitario.

Chapter 10
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